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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

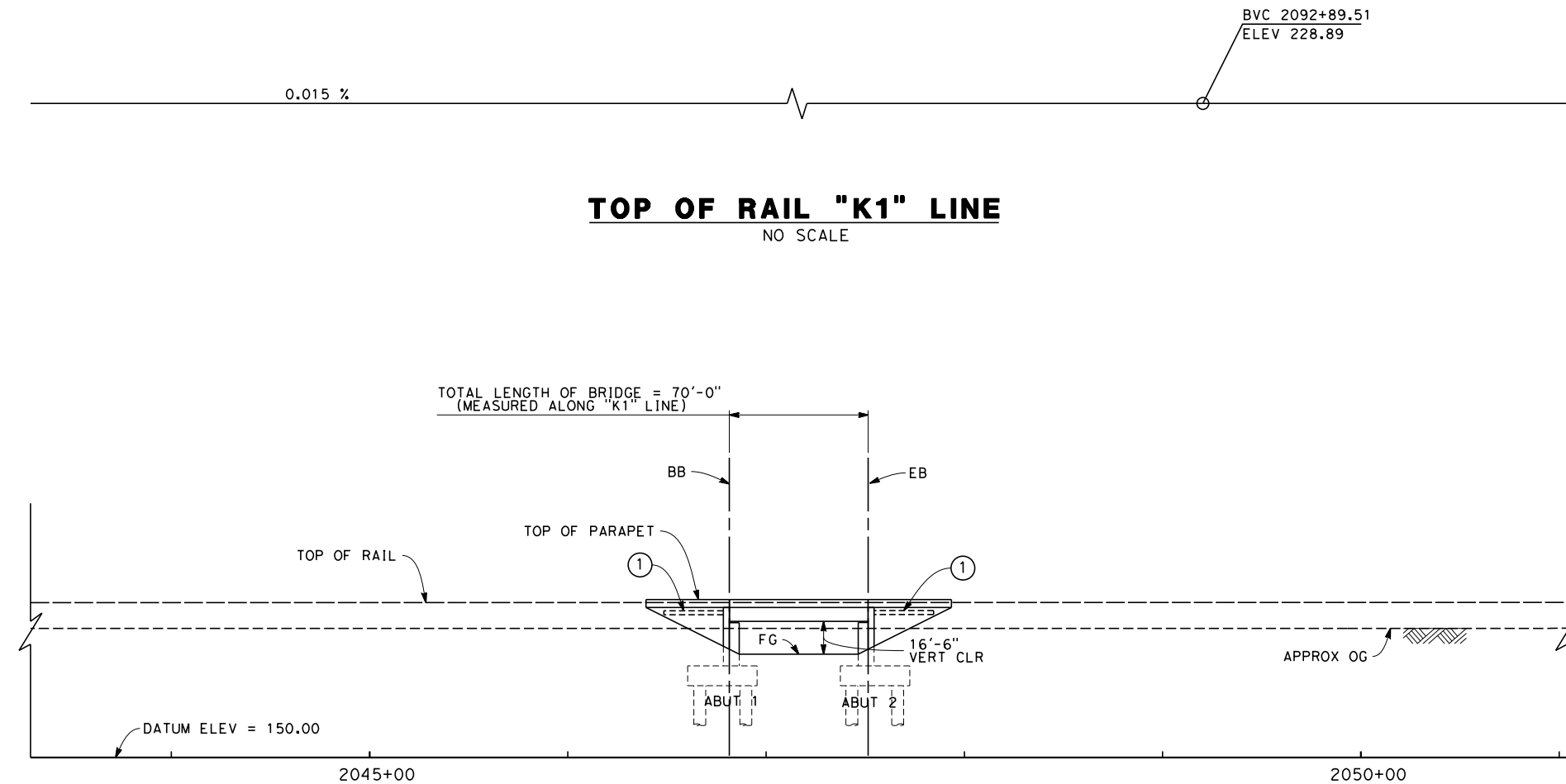
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CONSTRUCTION**



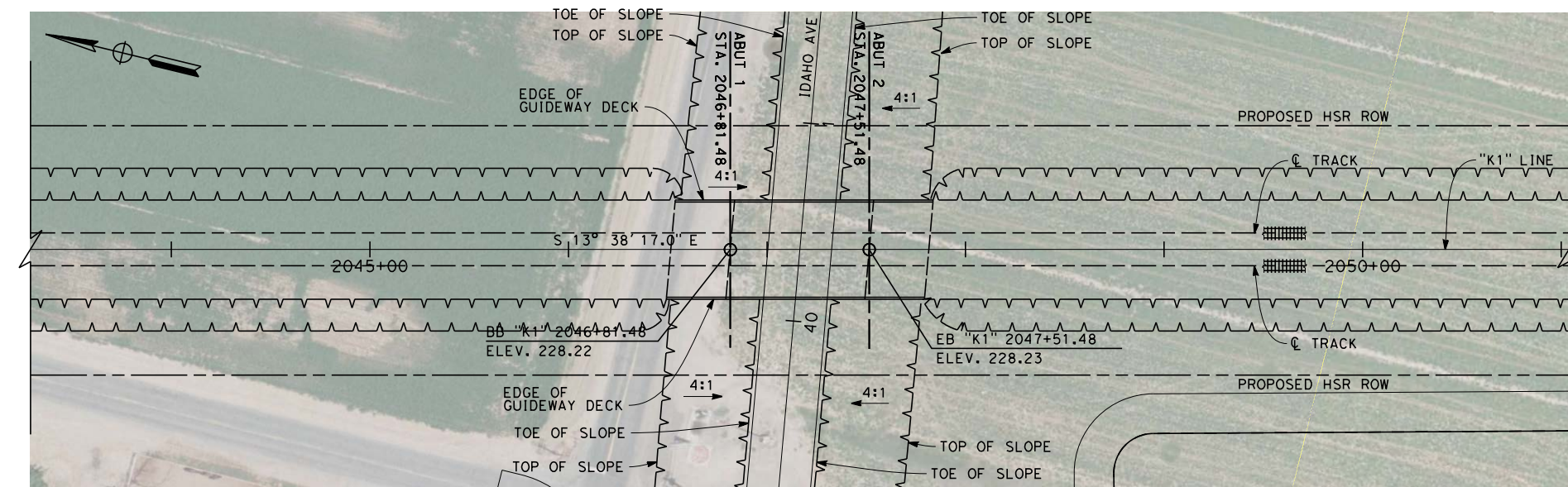
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K1
IDAHO AVE UNDERPASS
KEY MAP

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2060
SCALE
AS SHOWN
SHEET NO.
1 OF 2

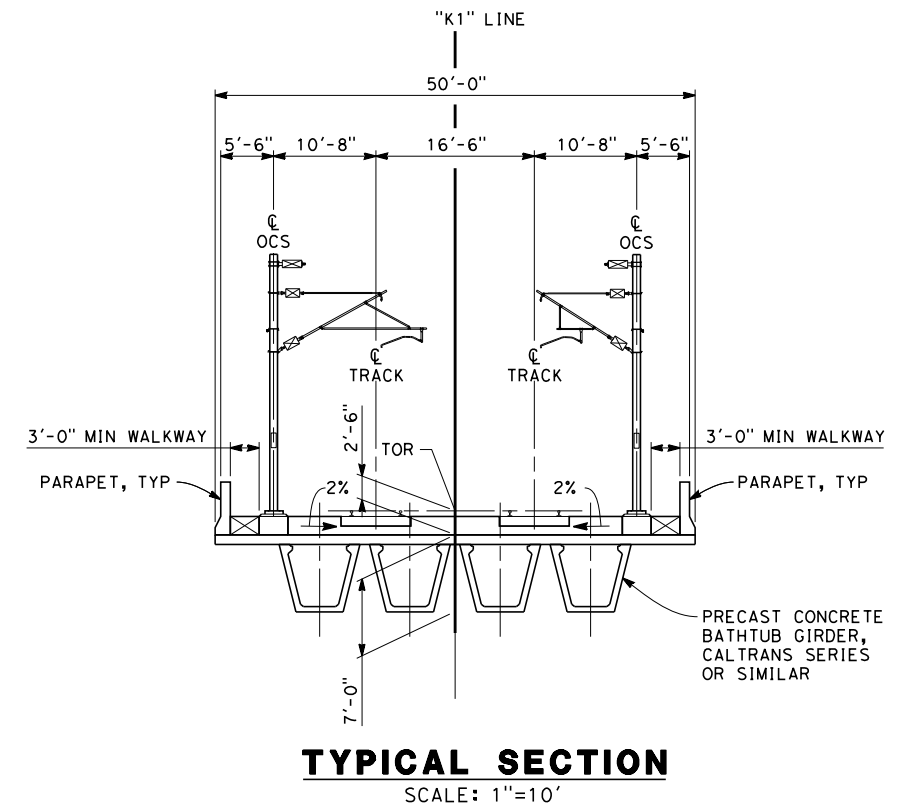
Nadine.Hutton 12/12/2013 10:31:56 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2061.dgn



ELEVATION
SCALE: 1"=40'



PLAN
SCALE: 1"=40'

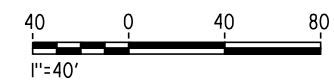


NOTES:

1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K1 IDAHO AVE UNDERPASS PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2061
SCALE AS SHOWN
SHEET NO. 2 OF 2

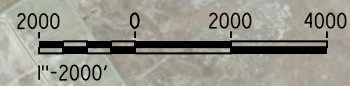
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LEGEND

— EXISTING FREIGHT RAILROAD

— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M.FISHER

DRAWN BY
F.PALERMO

CHECKED BY
A.ARMSTRONG

IN CHARGE
R.COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K1
12TH AVE UNDERPASS
KEY MAP

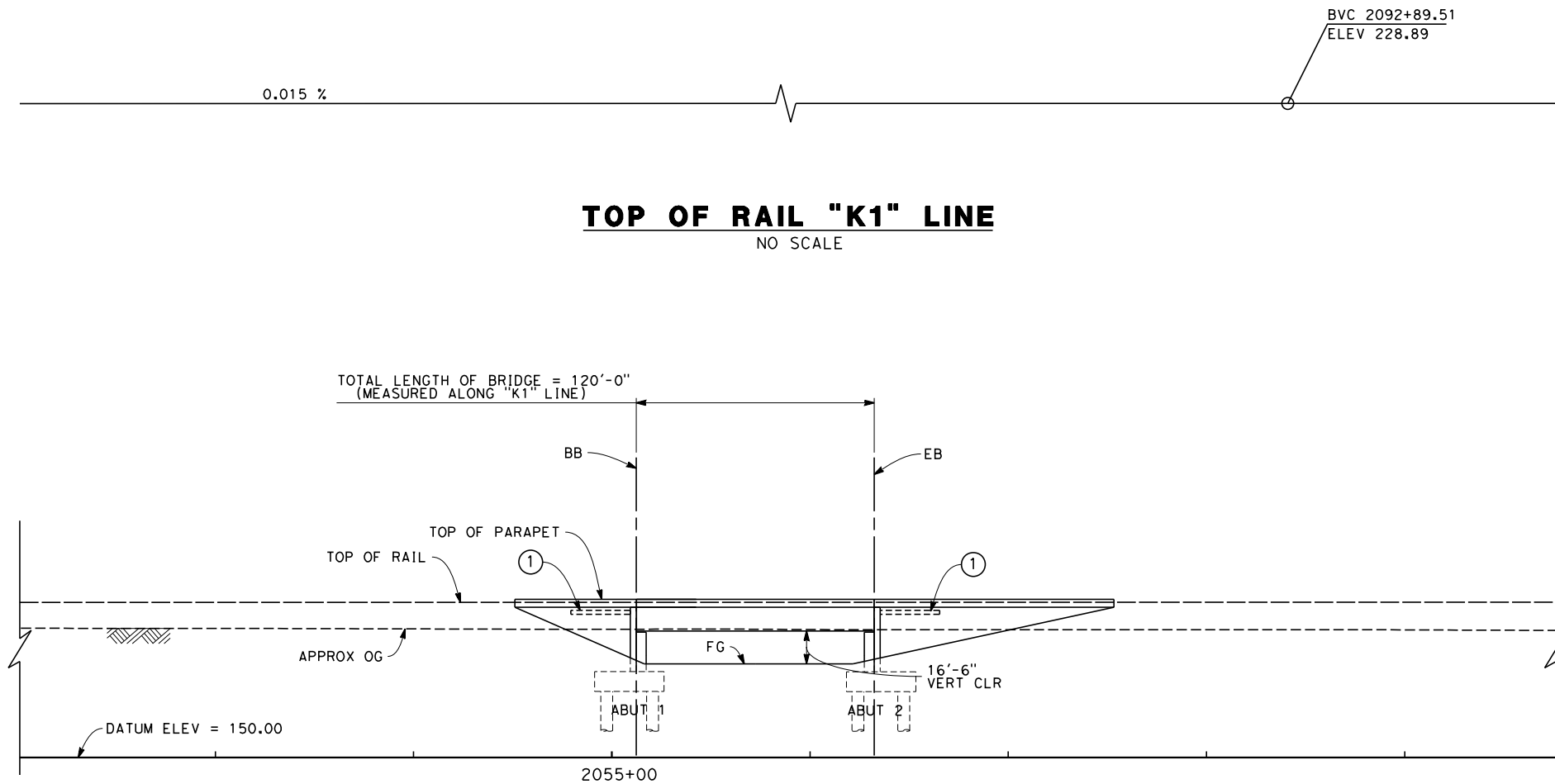
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2065

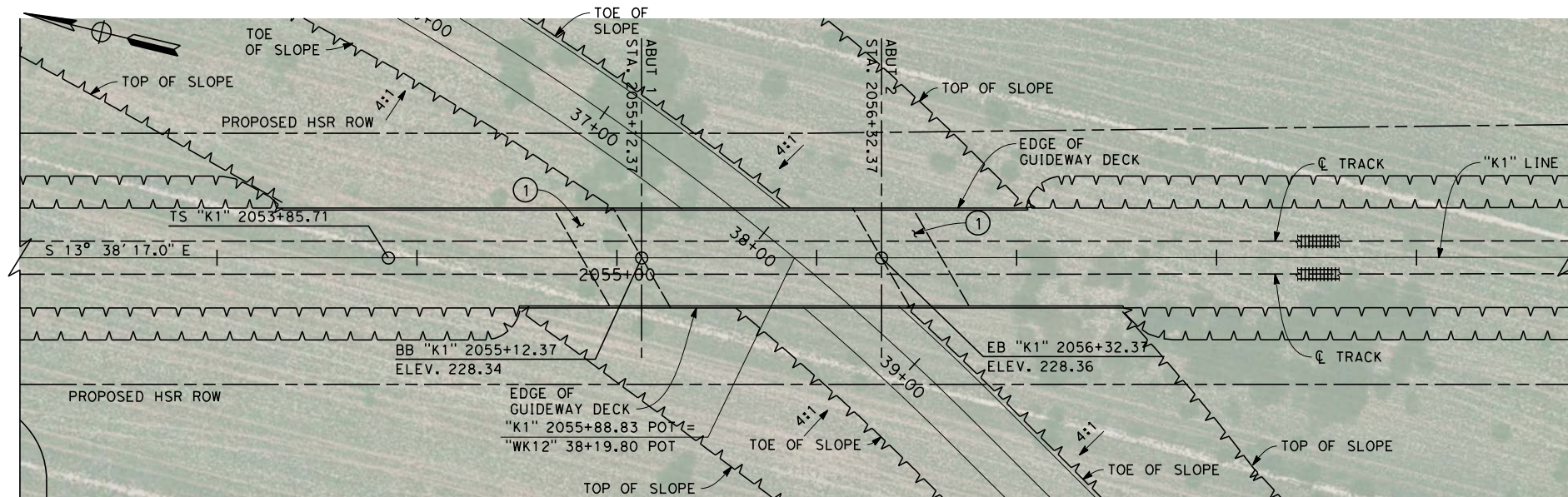
SCALE
AS SHOWN

SHEET NO.
1 OF 2

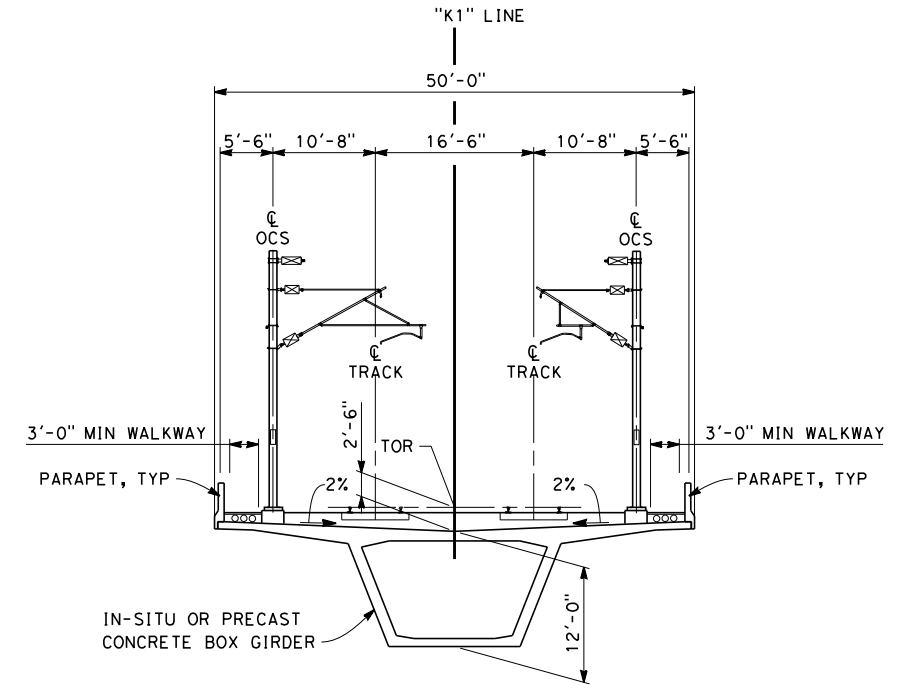
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ELEVATION
SCALE: 1"=40'



PLAN
SCALE: 1"=40'



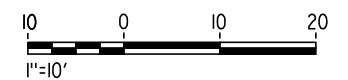
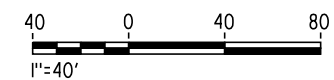
TYPICAL SECTION
SCALE: 1"=10'

NOTES:

1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- INDICATES RAILROAD AND
HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
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CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

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NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K1 12TH AVE UNDERPASS PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2066
SCALE AS SHOWN
SHEET NO. 2 OF 2

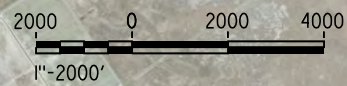
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LEGEND

— EXISTING FREIGHT RAILROAD

— PROPOSED CHST



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CHECKED BY
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IN CHARGE
R.COFFIN

DATE
12/31/13

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DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K1
S 11TH AVE UNDERPASS
KEY MAP

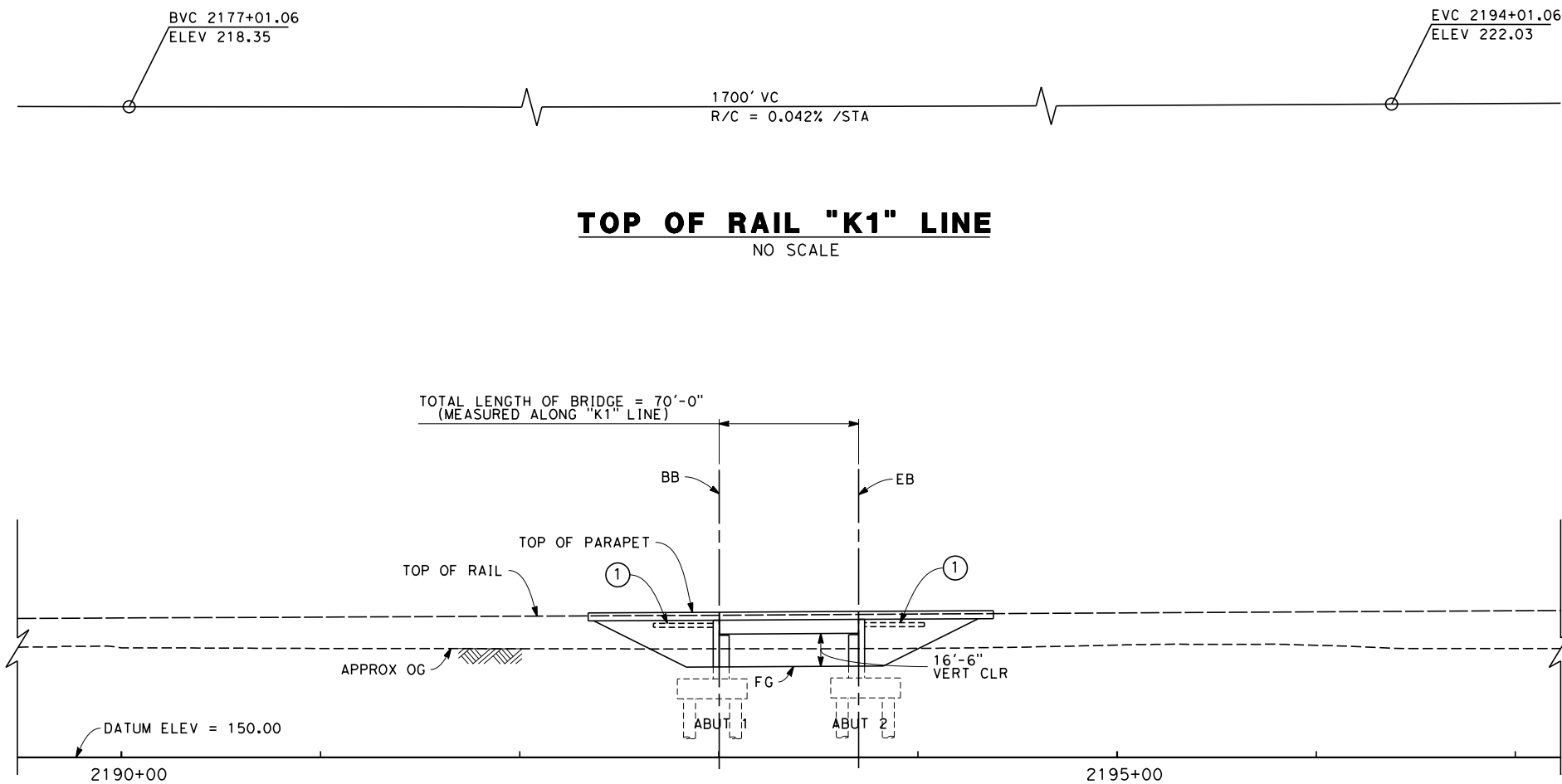
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HSR 06-0003

DRAWING NO.
SV2070

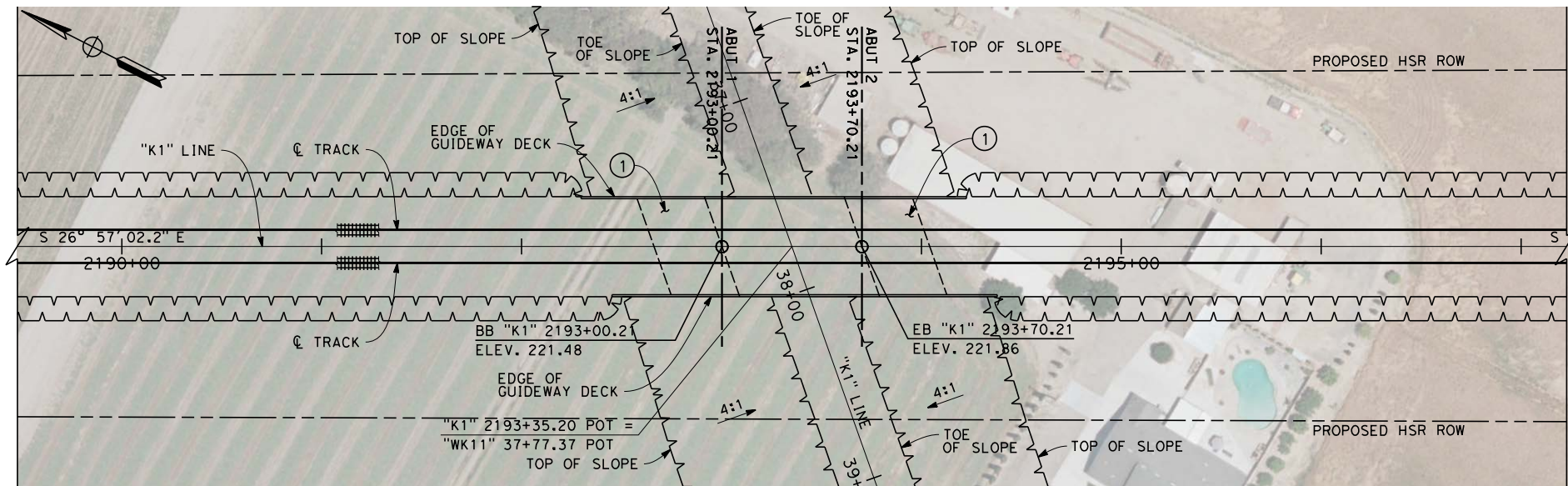
SCALE
AS SHOWN

SHEET NO.
1 OF 2

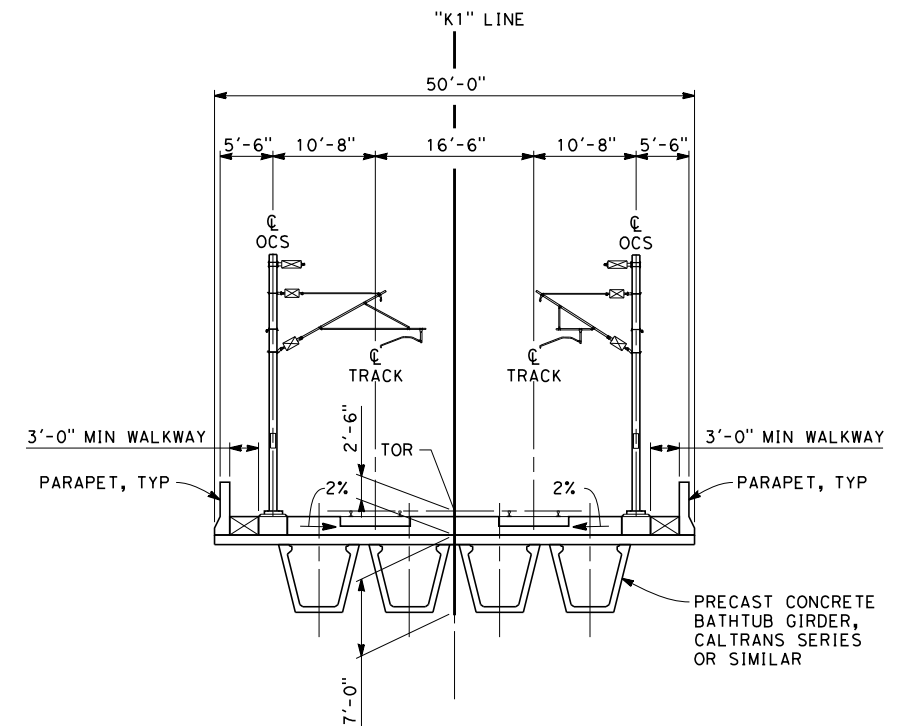
Nadine.Hutton 12/12/2013 10:33:14 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2071.dgn



ELEVATION
SCALE: 1"=40'



PLAN
SCALE: 1"=40'



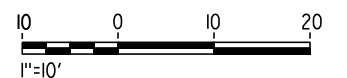
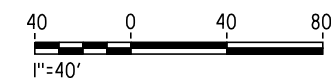
TYPICAL SECTION
SCALE: 1"=10'

NOTES:

1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K1 S 11TH AVE UNDERPASS PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2071
SCALE AS SHOWN
SHEET NO. 2 OF 2

Nadine.Hutton 12/12/2013 10:33:29 PM CAHSR-r1.tbl PDF_half_black_200dpi.plt \\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2080.dgn



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DESIGNED BY
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DRAWN BY
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CHECKED BY
A.ARMSTRONG
IN CHARGE
R.COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

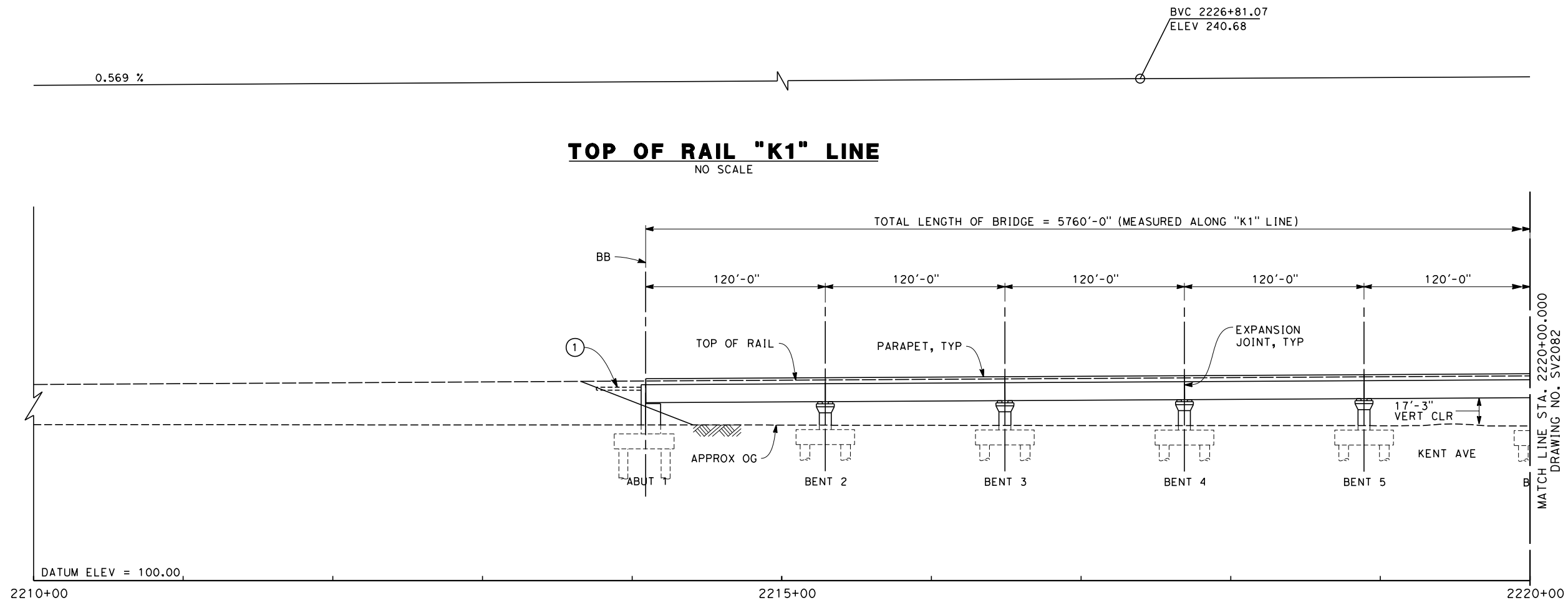
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CONSTRUCTION**



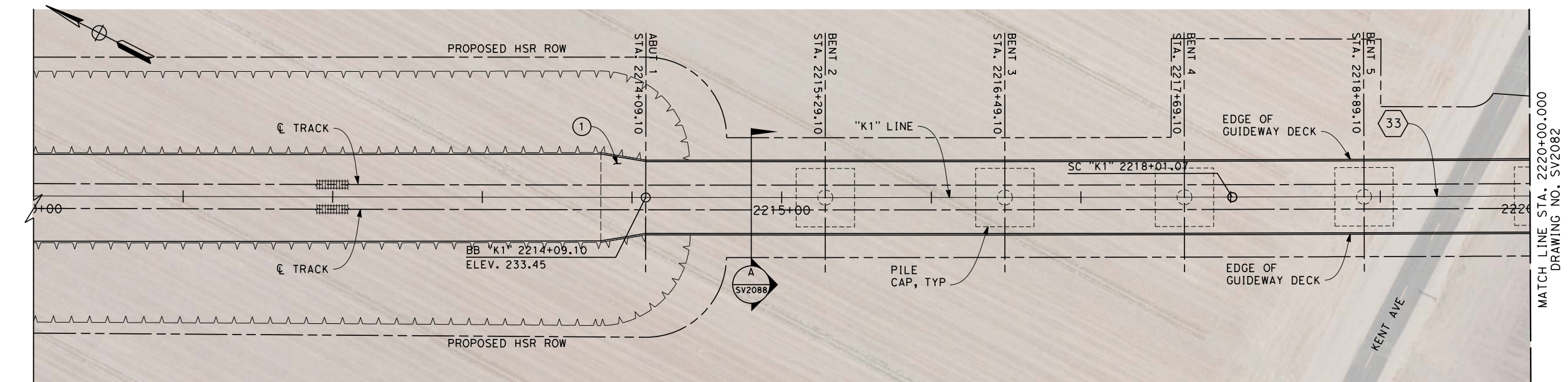
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K1
SOUTH BNSF VIADUCT
KEY MAP

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2080
SCALE
AS SHOWN
SHEET NO.
1 OF 9

Nadine.Hutton 12/12/2013 10:33:59 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2081.dgn



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

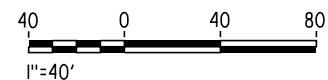
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

33

R = 100000.00'
Δ = 02° 41' 21.7"
T = 2347.4'
L = 4693.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

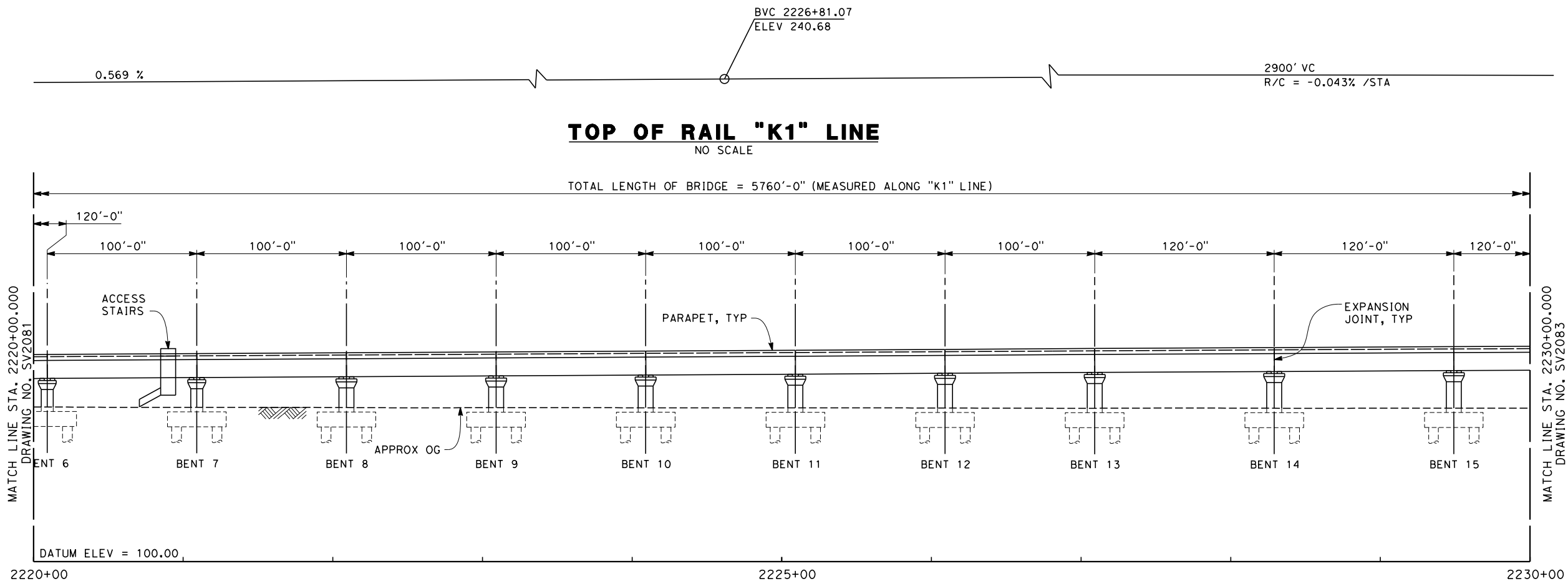


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

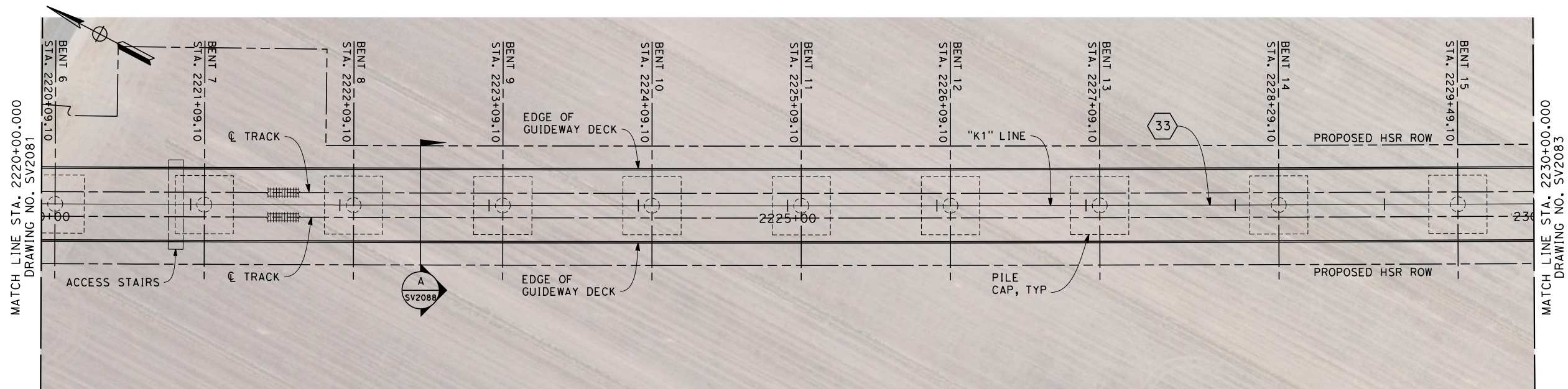
KAWEAH SUBSECTION
ALIGNMENT K1
SOUTH BNSF VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2081
SCALE AS SHOWN
SHEET NO. 2 OF 9

Nadine.Hutton 12/12/2013 10:34:11 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2082.dgn



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

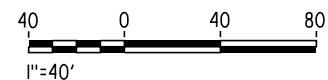
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

33

R = 100000.00'
Δ = 02° 41' 21.7"
T = 2347.4'
L = 4693.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

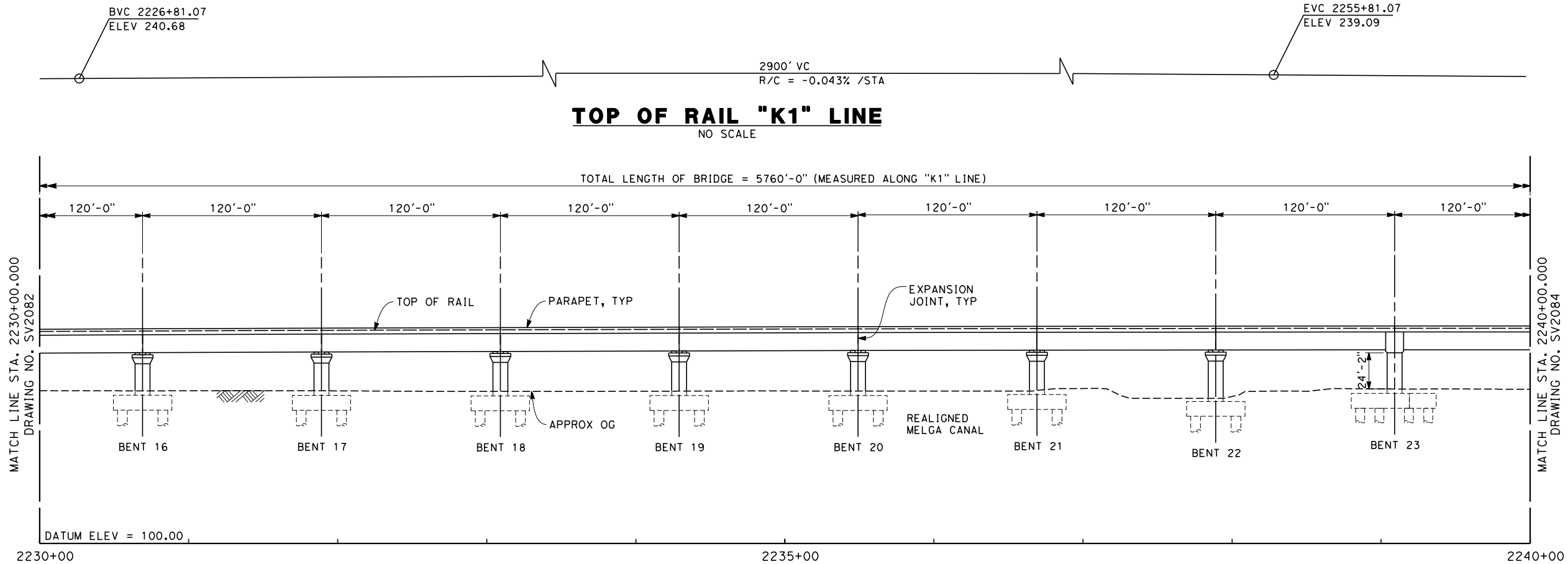


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

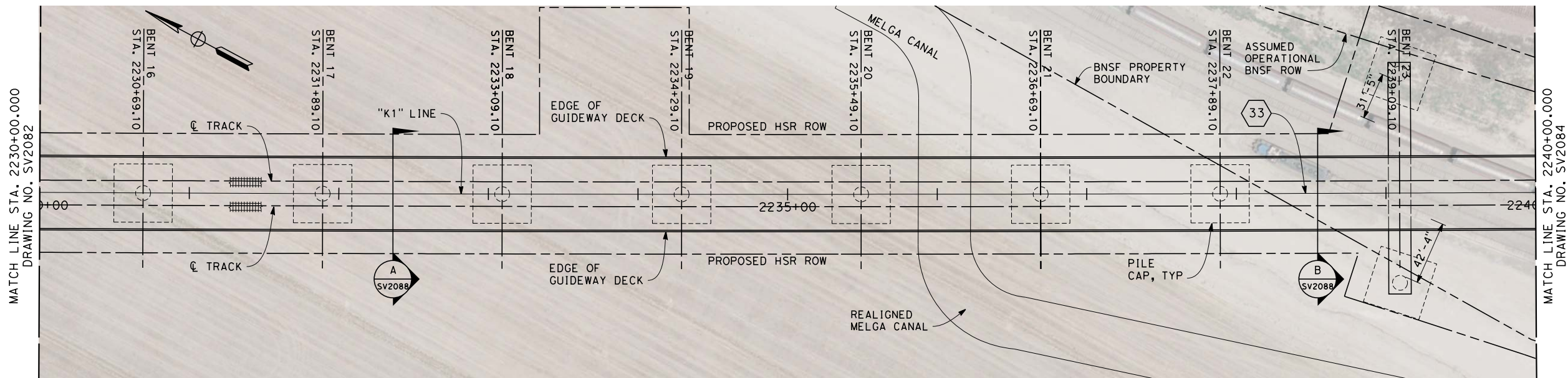
KAWEAH SUBSECTION
ALIGNMENT K1
SOUTH BNSF VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2082
SCALE AS SHOWN
SHEET NO. 3 OF 9

Nadine.Hutton 12/12/2013 10:34:31 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2083.dgn



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

33
R = 100000.00'
Δ = 02° 41' 21.7"
T = 2347.4'
L = 4693.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

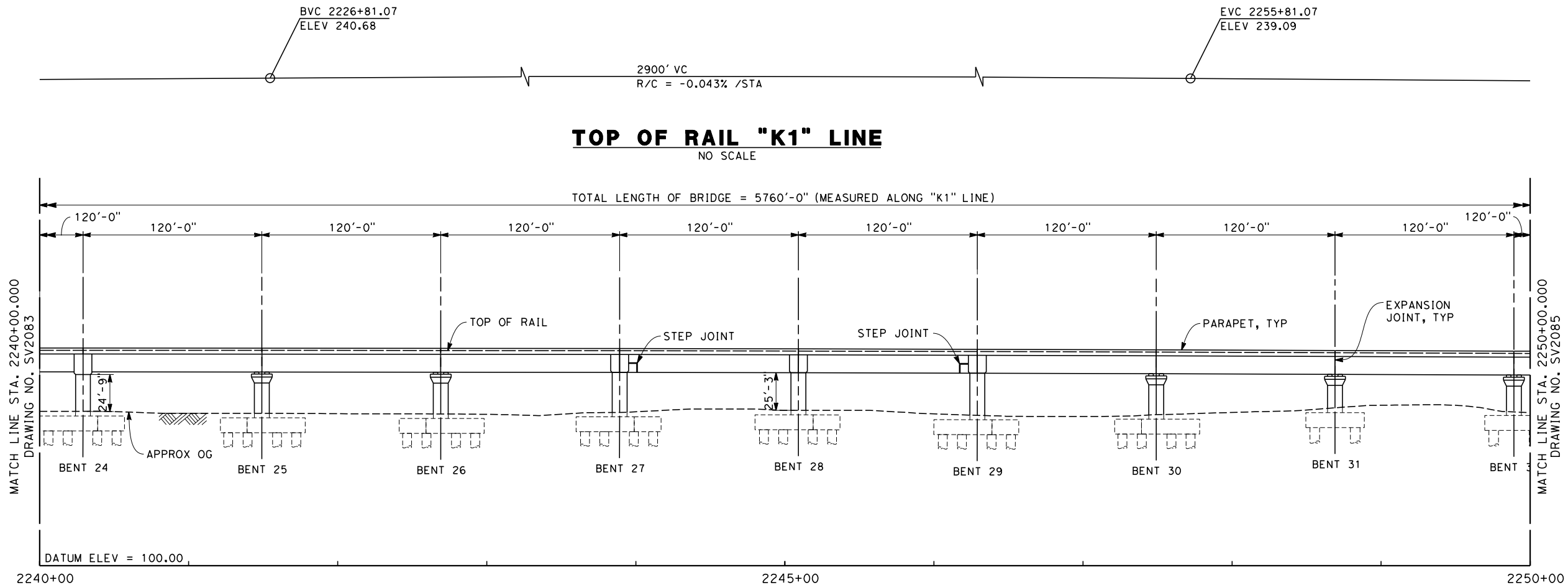


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

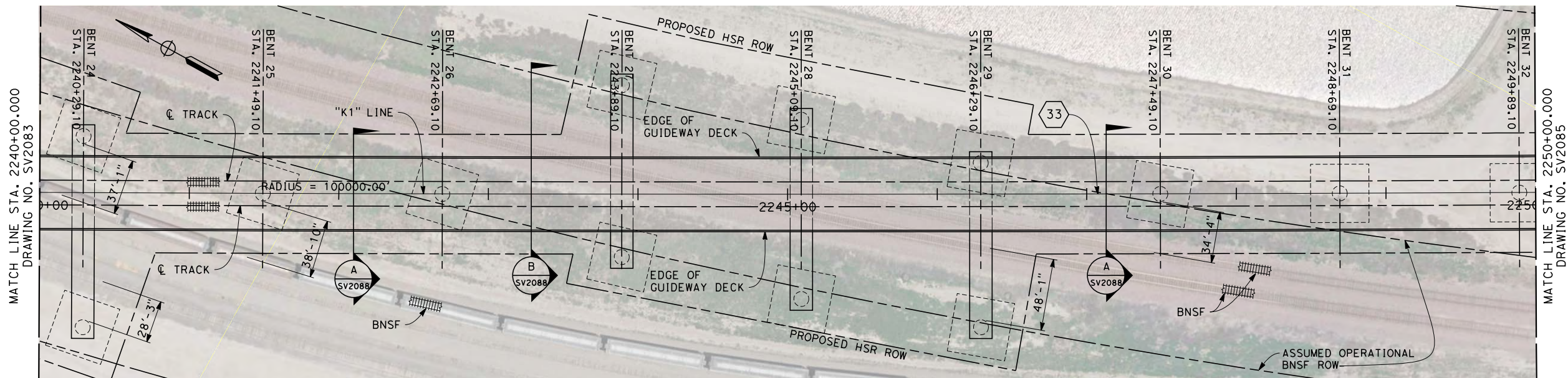
KAWEAH SUBSECTION
ALIGNMENT K1
SOUTH BNSF VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2083
SCALE AS SHOWN
SHEET NO. 4 OF 9

Nadine.Hutton 12/12/2013 10:34:55 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2084.dgn



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

33
R = 100000.00'
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L = 4693.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

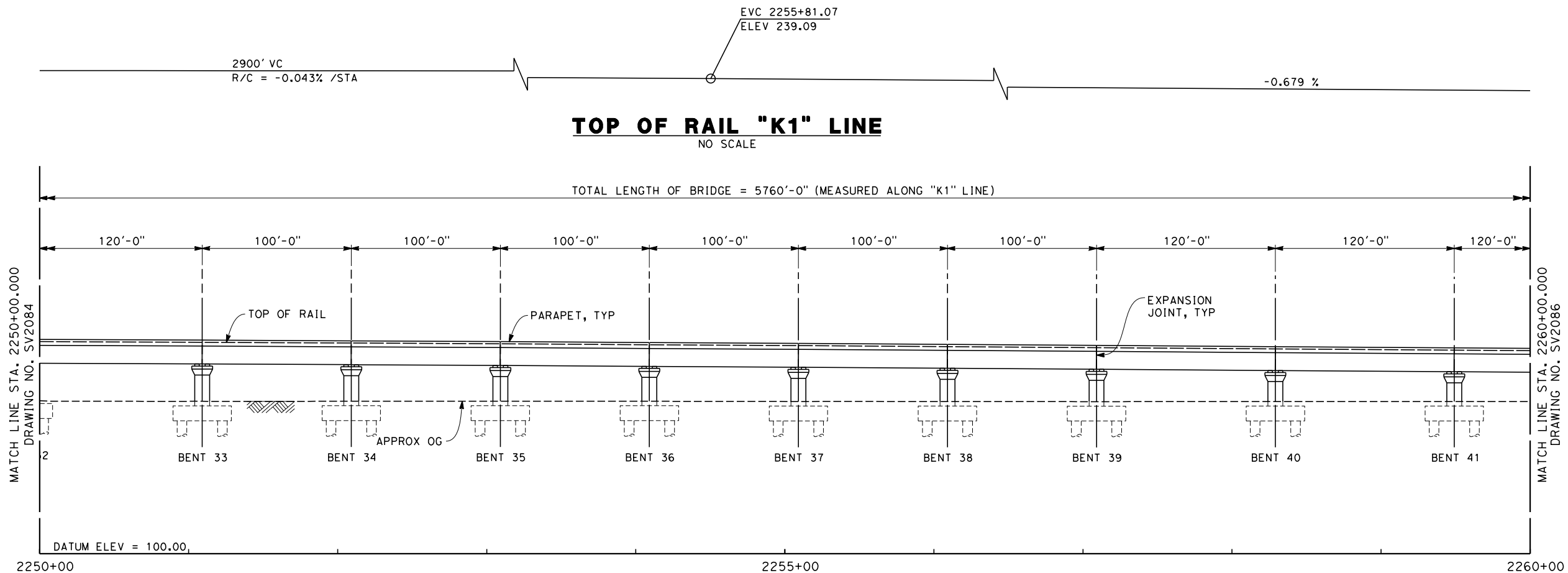


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

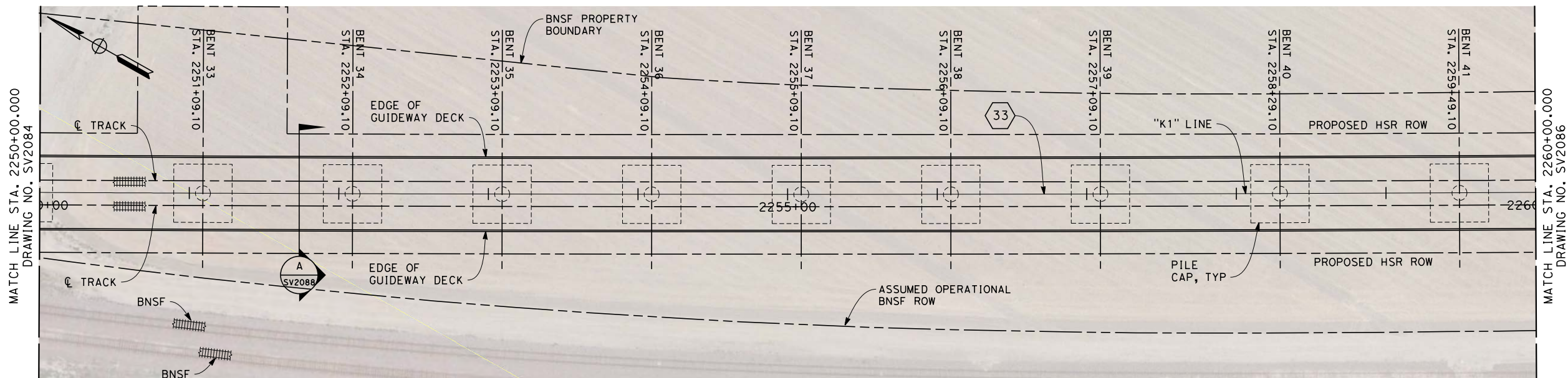
KAWEAH SUBSECTION
ALIGNMENT K1
SOUTH BNSF VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2084
SCALE AS SHOWN
SHEET NO. 5 OF 9

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

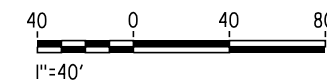
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

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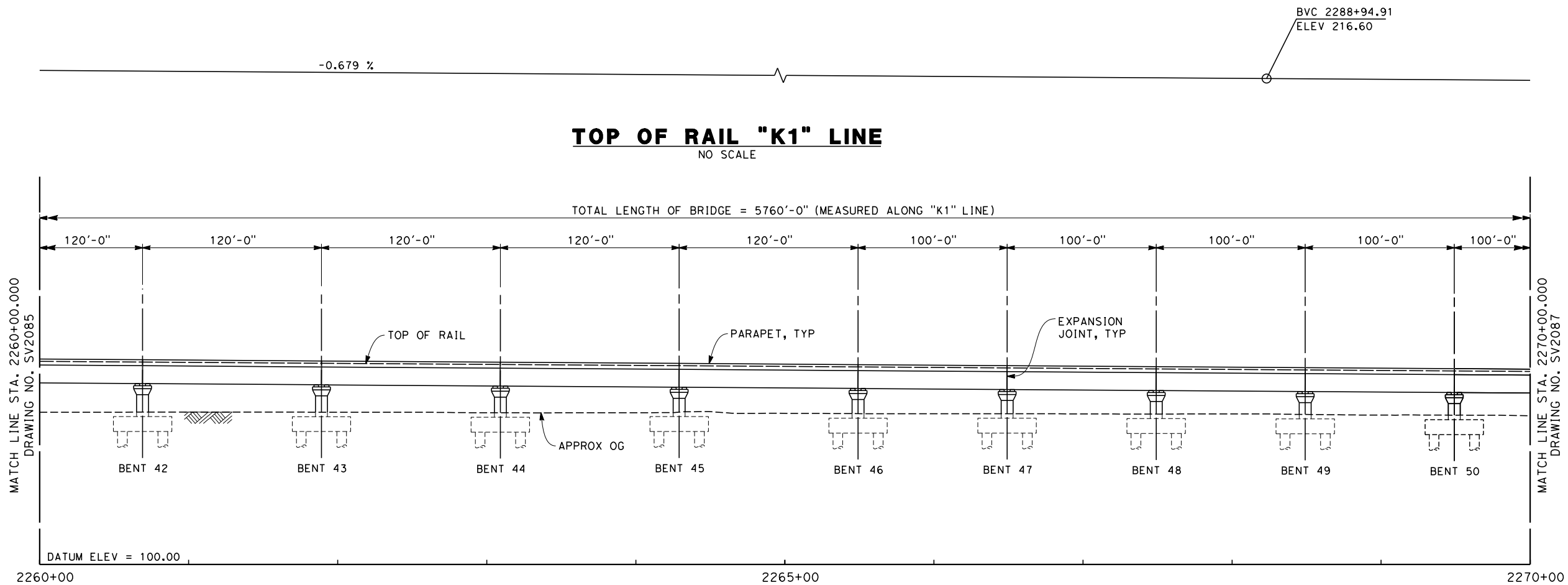
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CONSTRUCTION**



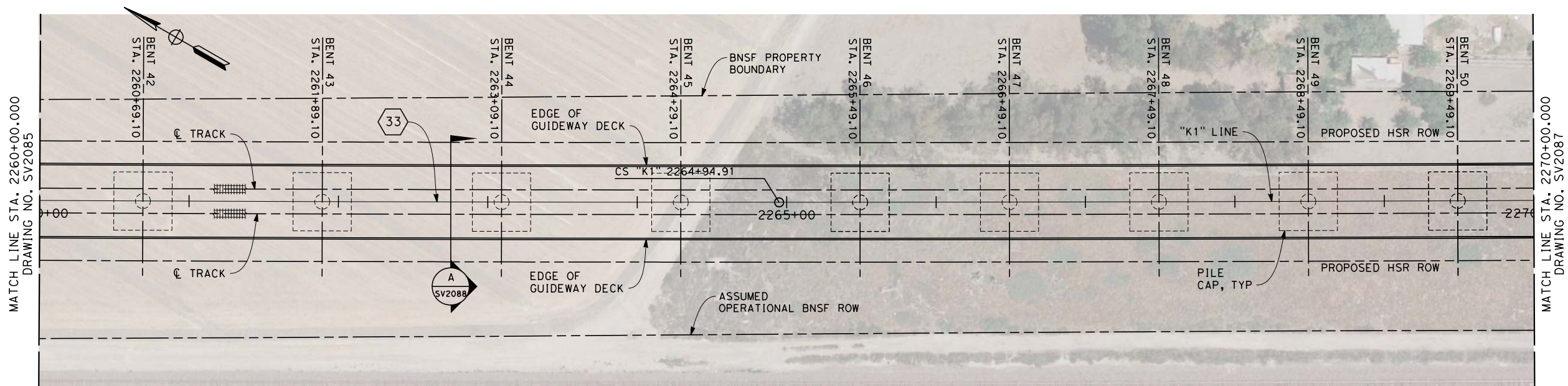
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K1
SOUTH BNSF VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2085
SCALE AS SHOWN
SHEET NO. 6 OF 9

Nadine.Hutton 12/12/2013 10:35:33 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2086.dgn



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
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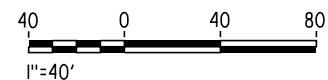
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

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R = 100000.00'
Δ = 02° 41' 21.7"
T = 2347.4'
L = 4693.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

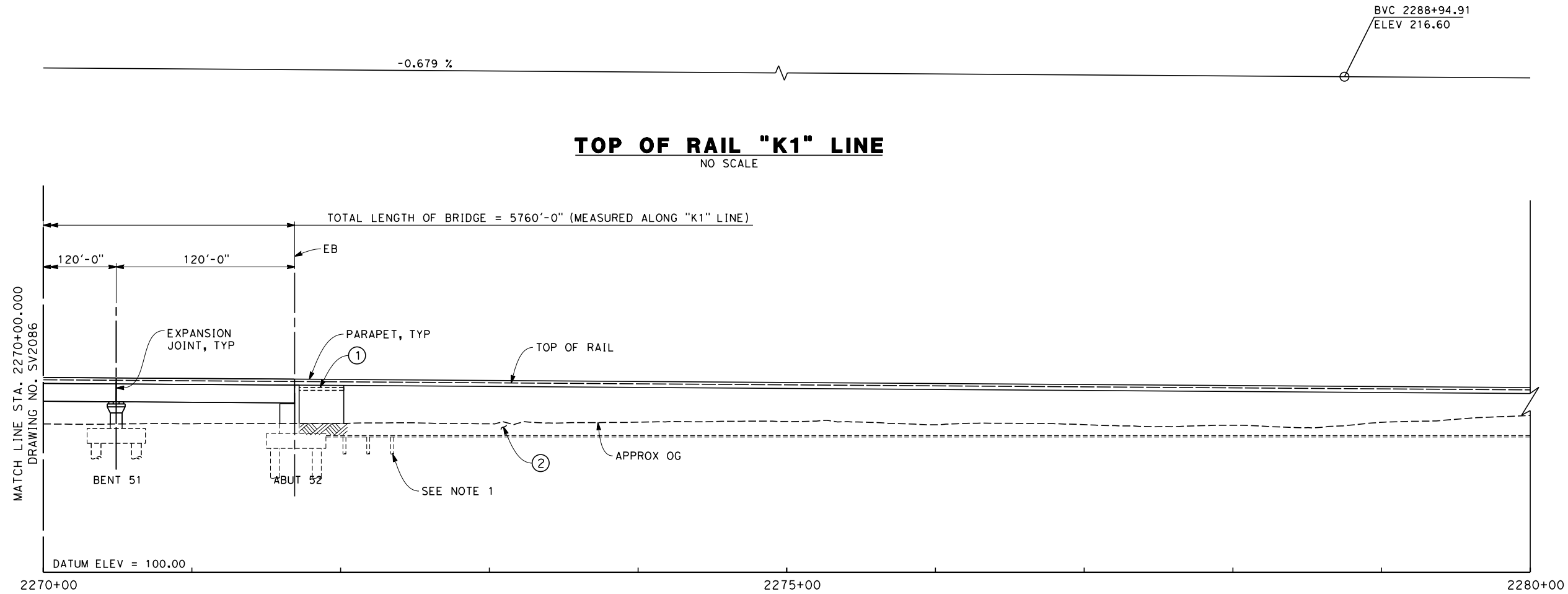


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

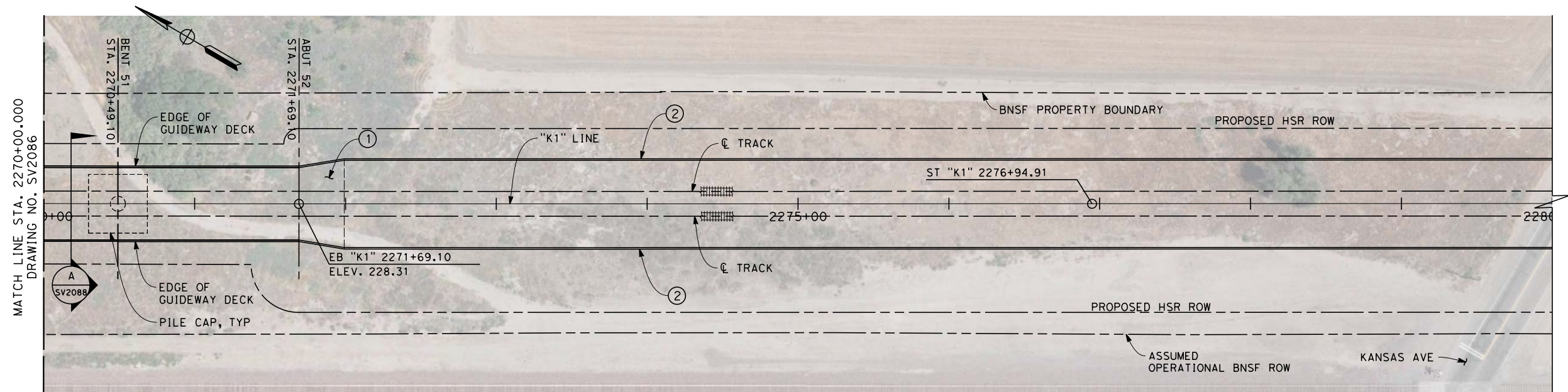
KAWEAH SUBSECTION
ALIGNMENT K1
SOUTH BNSF VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2086
SCALE AS SHOWN
SHEET NO. 7 OF 9

Nadine.Hutton 12/12/2013 10:35:54 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2087.dgn



ELEVATION
SCALE 1" = 40'



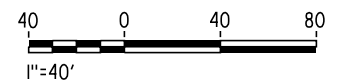
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST
IN-SITU
STEEL TRUSS - INSITU, SLID
OR LAUNCHED
ELEVATED SLABS - PC BEAM AND
INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

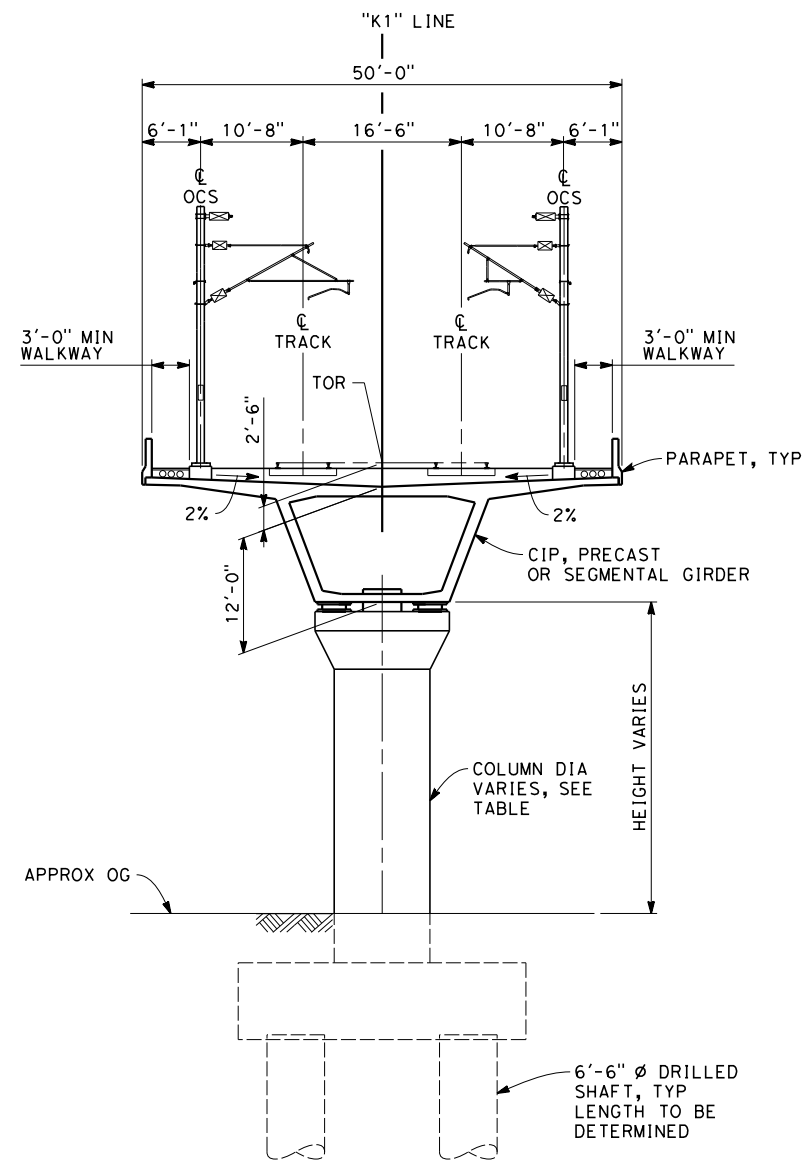


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K1
SOUTH BNSF VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2087
SCALE AS SHOWN
SHEET NO. 8 OF 9

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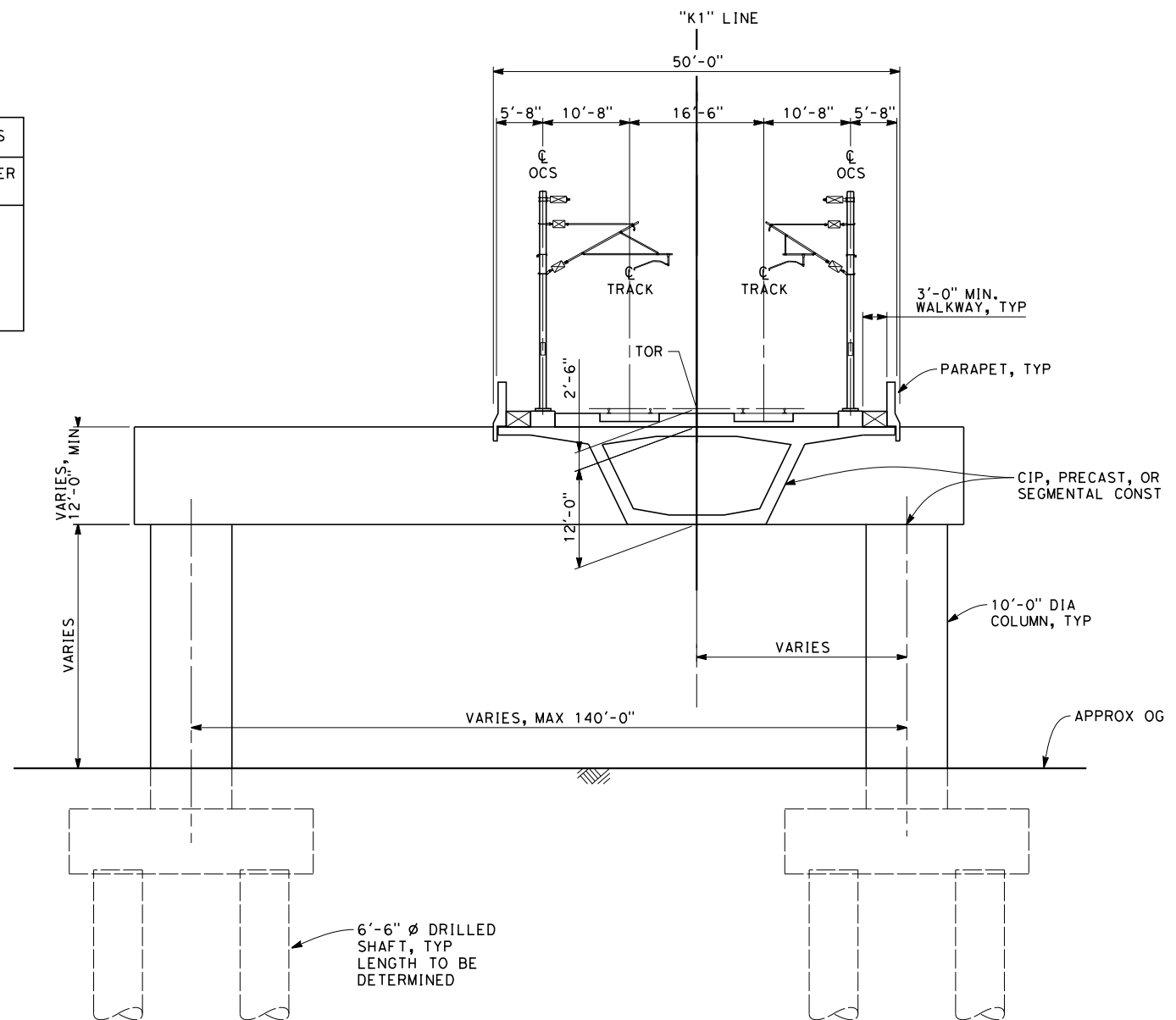


SECTION A

SCALE: 1"=10'

STA. 2214+09 THROUGH 2237+89
STA. 2240+29 THROUGH 2242+69
STA. 2246+29 THROUGH 2271+69

COLUMN DIAMETERS	
HEIGHT TO SOFFIT	DIAMETER
0-20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT



SECTION B

SCALE: 1"=10'

STA. 2237+89 THROUGH 2240+29
STA. 2242+69 THROUGH 2246+29

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALEMRO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K1 SOUTH BNSF VIADUCT TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2088
SCALE AS SHOWN
SHEET NO. 9 OF 9

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

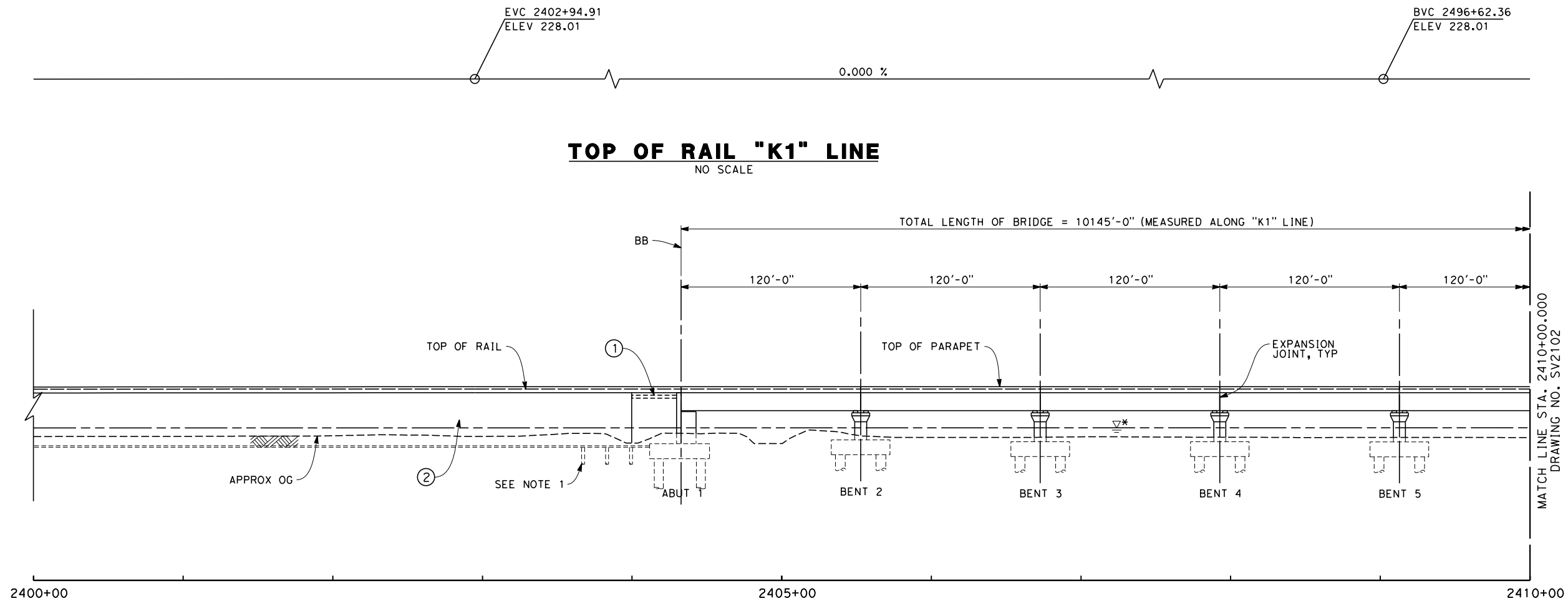
**NOT FOR
CONSTRUCTION**



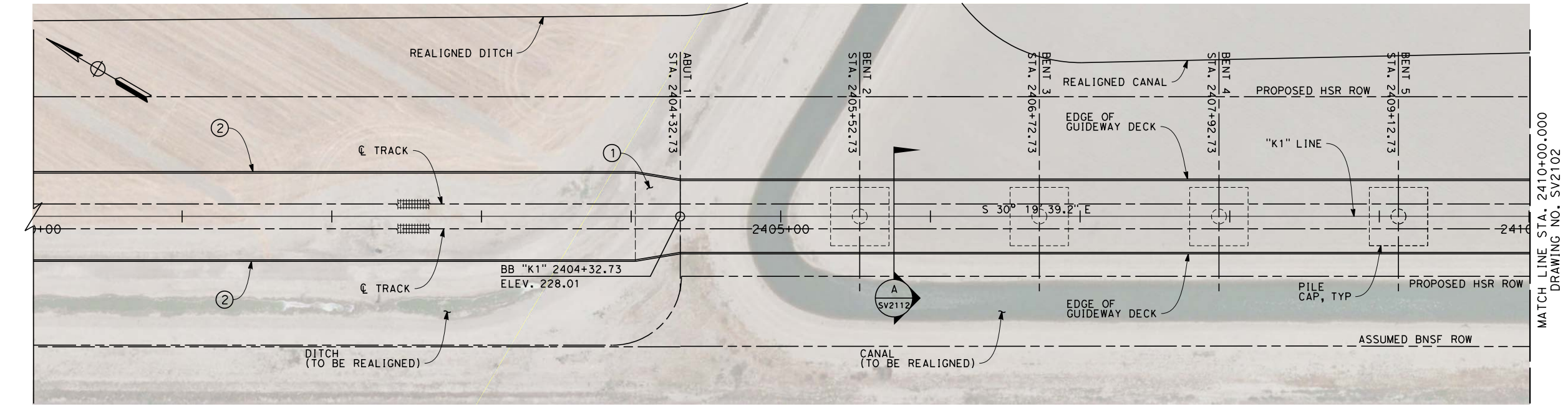
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
KEY MAP

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2100
SCALE
AS SHOWN
SHEET NO.
1 OF 14

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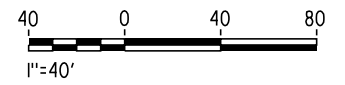
ELEVATION
SCALE 1" = 40'





PLAN
SCALE 1" = 40'

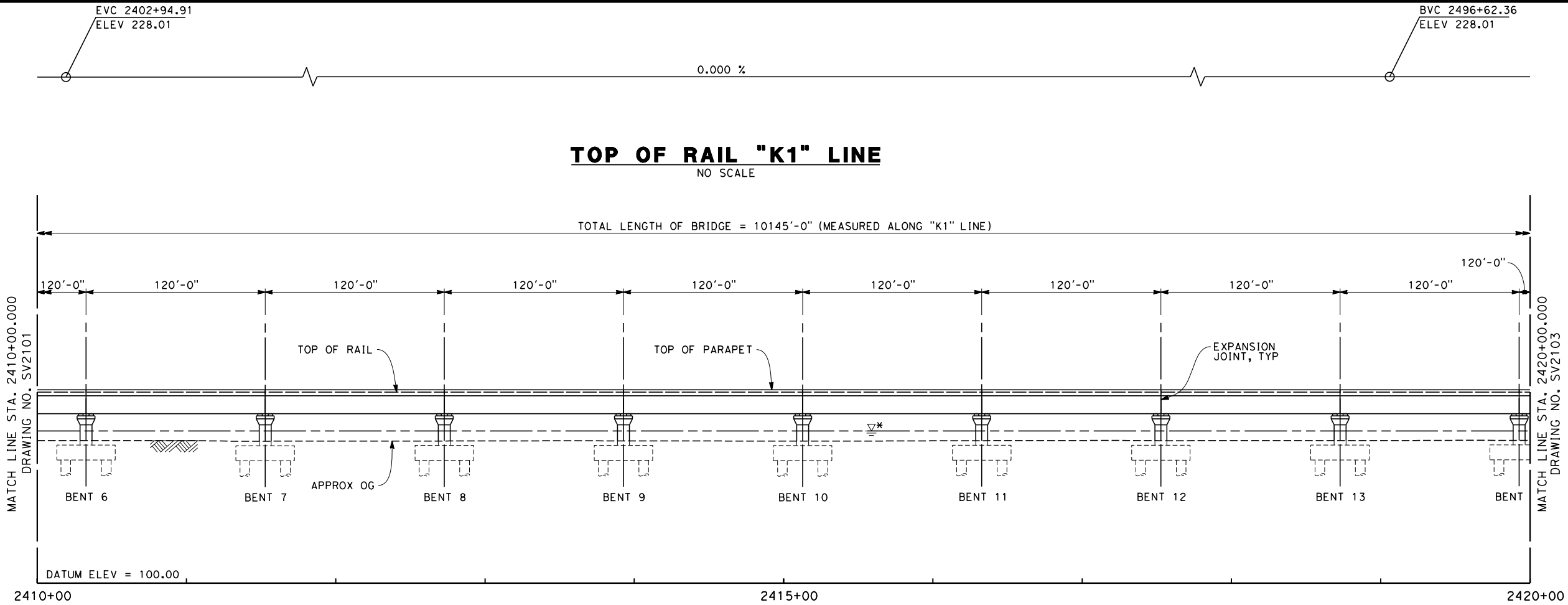
- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

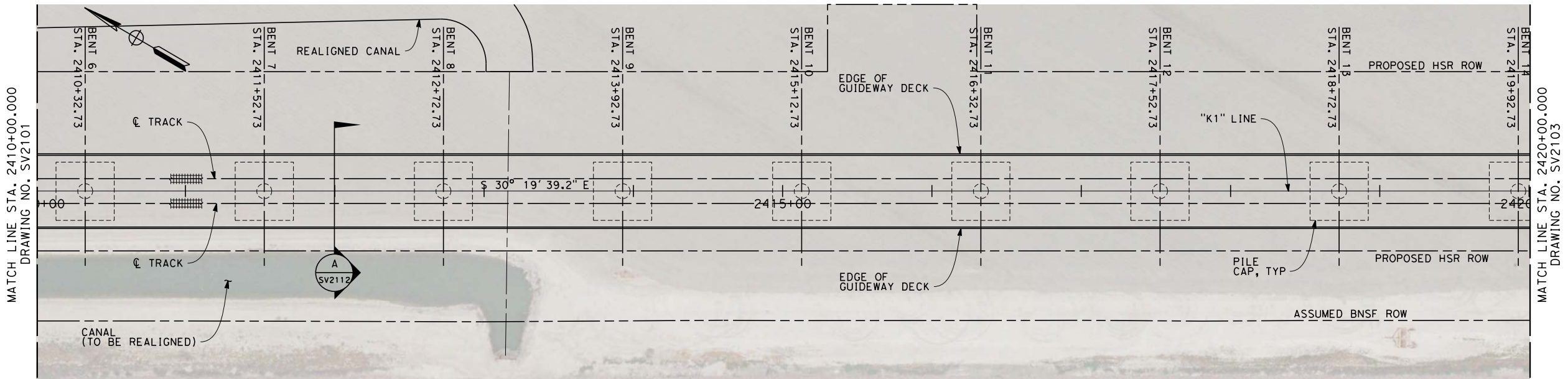


						DESIGNED BY M. FISHER	RECORD SET 15% DESIGN SUBMISSION NOT FOR CONSTRUCTION	 	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD KAWEAH SUBSECTION ALIGNMENT K1 CROSS CREEK VIADUCT PLAN AND ELEVATION		CONTRACT NO. HSR 06-0003
						DRAWN BY F. PALERMO					DRAWING NO. SV2101
						CHECKED BY A. ARMSTRONG					SCALE AS SHOWN
						IN CHARGE R. COFFIN					SHEET NO. 2 OF 14
						DATE 12/31/13					
REV	DATE	BY	CHK	APP	DESCRIPTION						

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ELEVATION
SCALE 1" = 40'



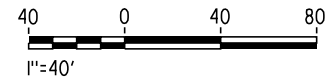
PLAN
SCALE 1" = 40'



NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

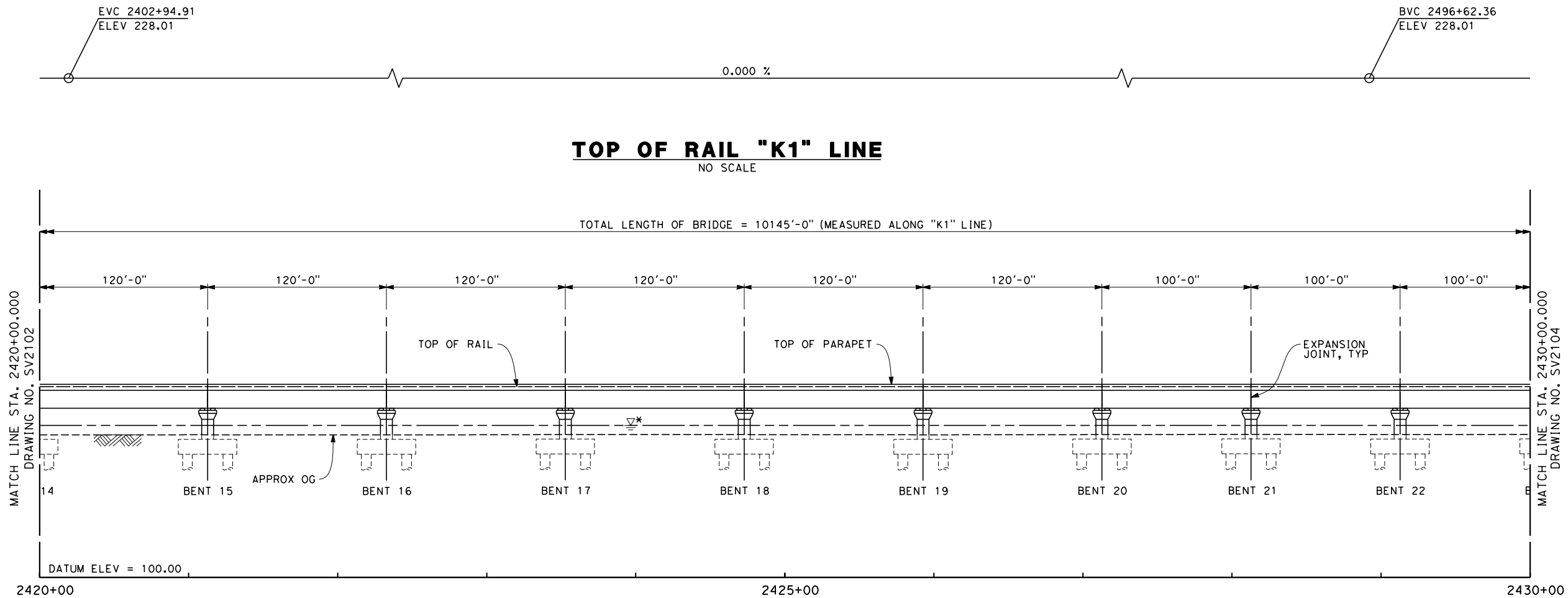
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

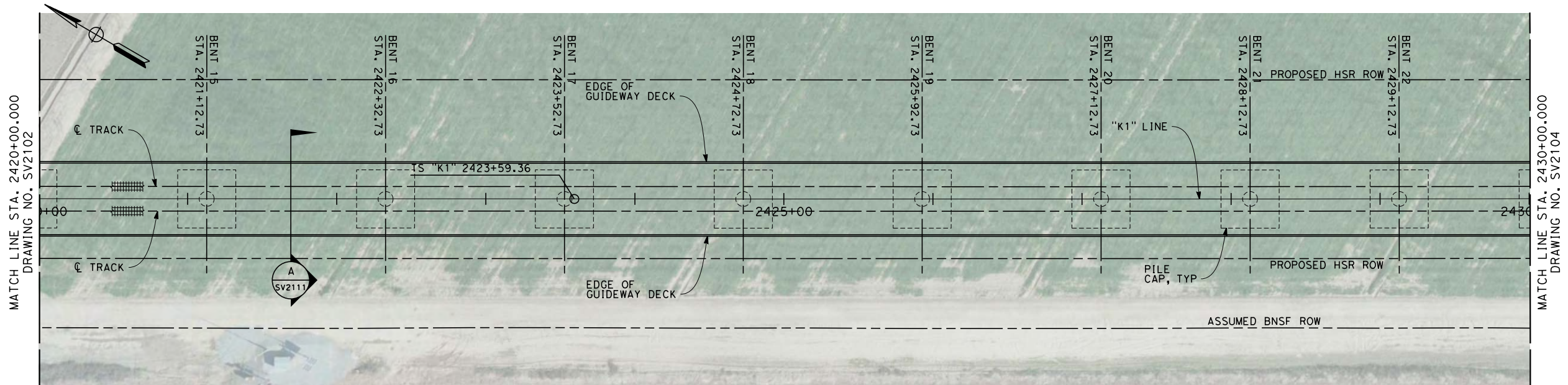


						DESIGNED BY M. FISHER	RECORD SET 15% DESIGN SUBMISSION NOT FOR CONSTRUCTION	 	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD KAWEAH SUBSECTION ALIGNMENT K1 CROSS CREEK VIADUCT PLAN AND ELEVATION		CONTRACT NO. HSR 06-0003
						DRAWN BY F. PALERMO					DRAWING NO. SV2102
						CHECKED BY A. ARMSTRONG					SCALE AS SHOWN
						IN CHARGE R. COFFIN					SHEET NO. 3 OF 14
REV	DATE	BY	CHK	APP	DESCRIPTION	DATE 12/31/13					

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

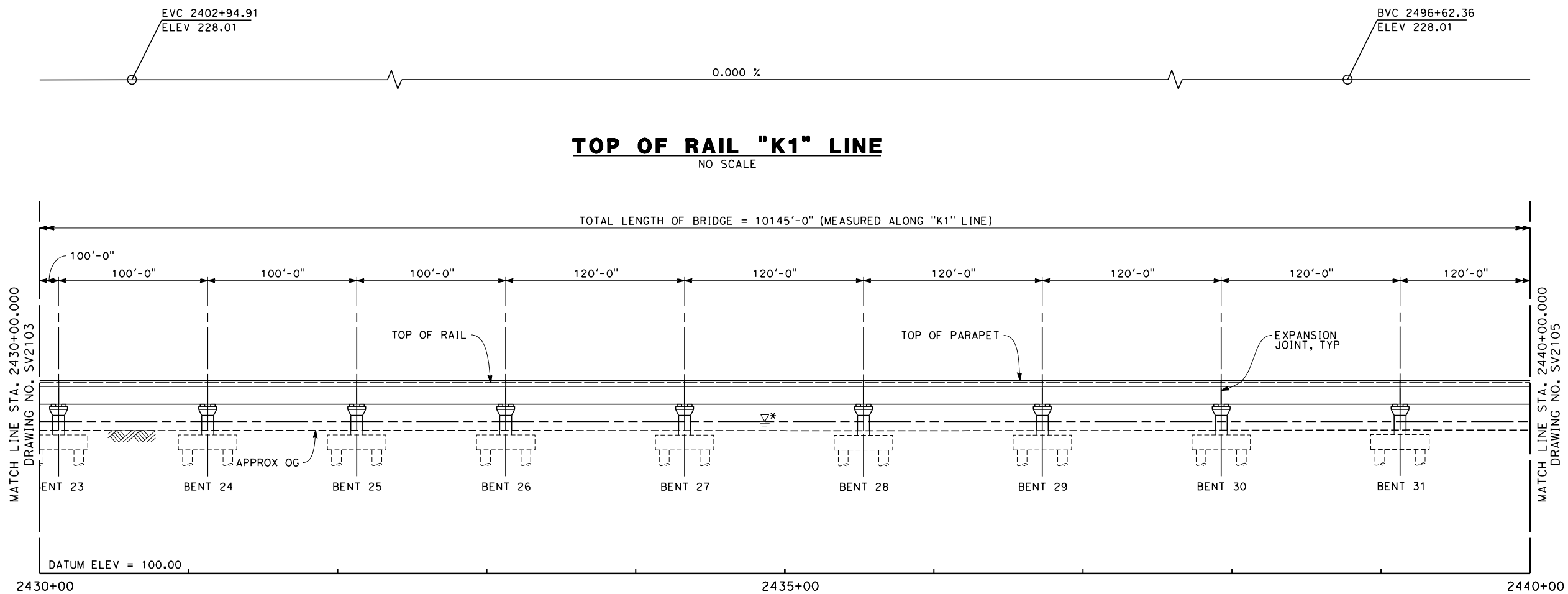
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NOT FOR CONSTRUCTION



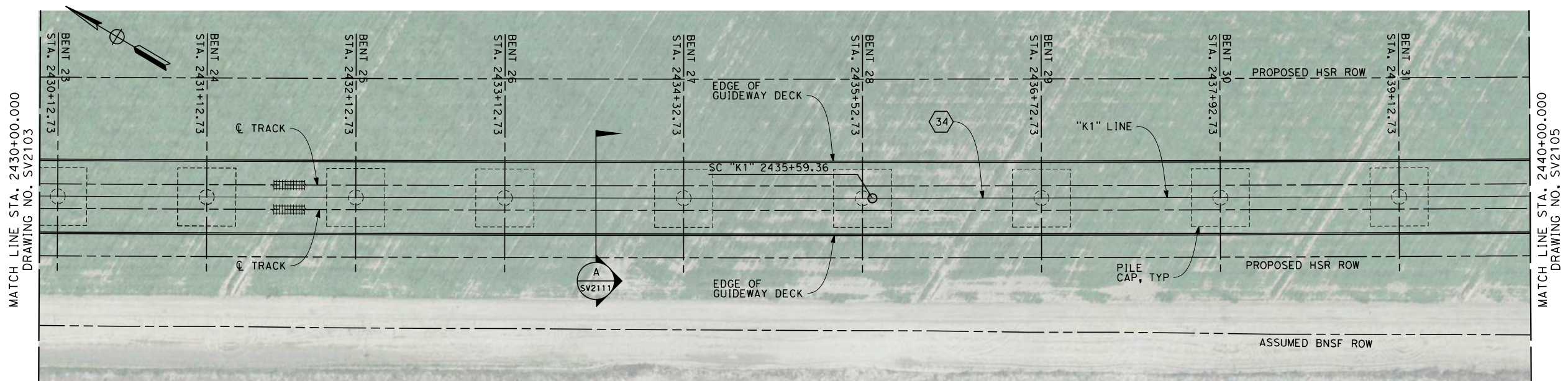
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2103
SCALE AS SHOWN
SHEET NO. 4 OF 14

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

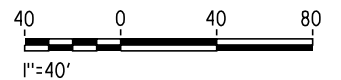
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

③4
R = 85000.00'
Δ = 0° 50' 01.6"
T = 618.5'
L = 1236.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

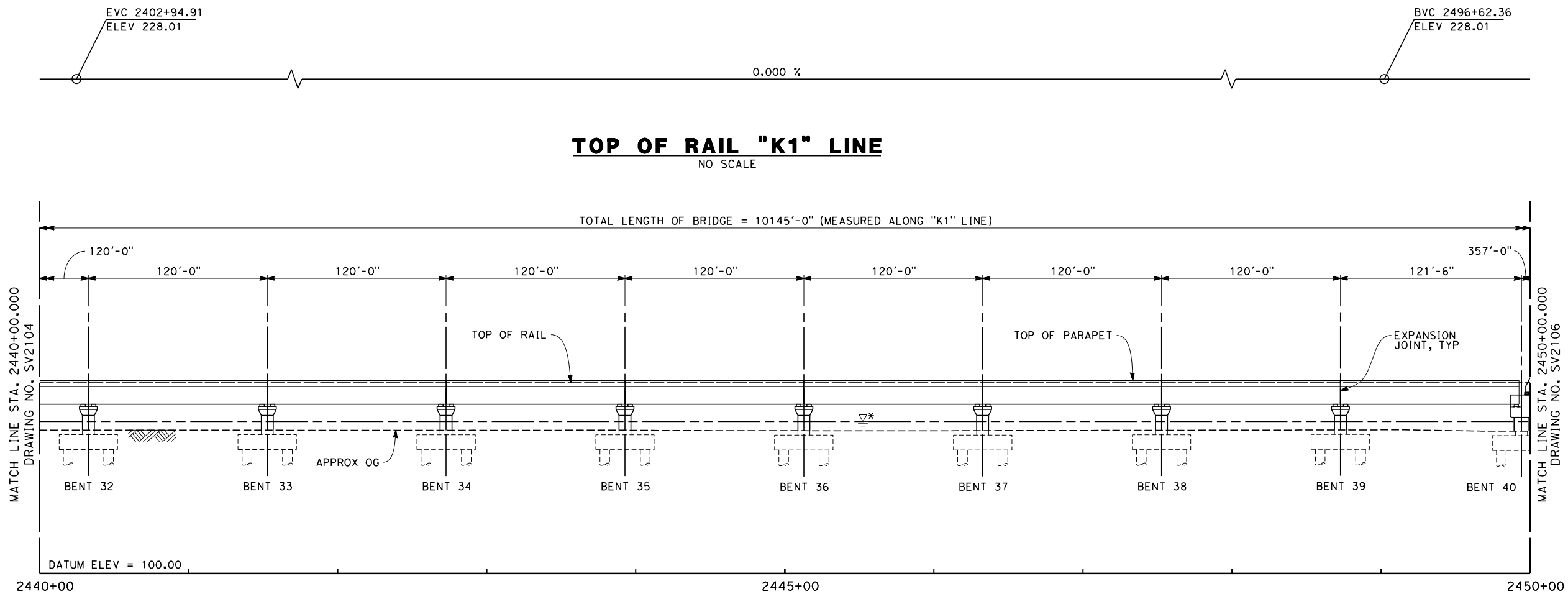


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

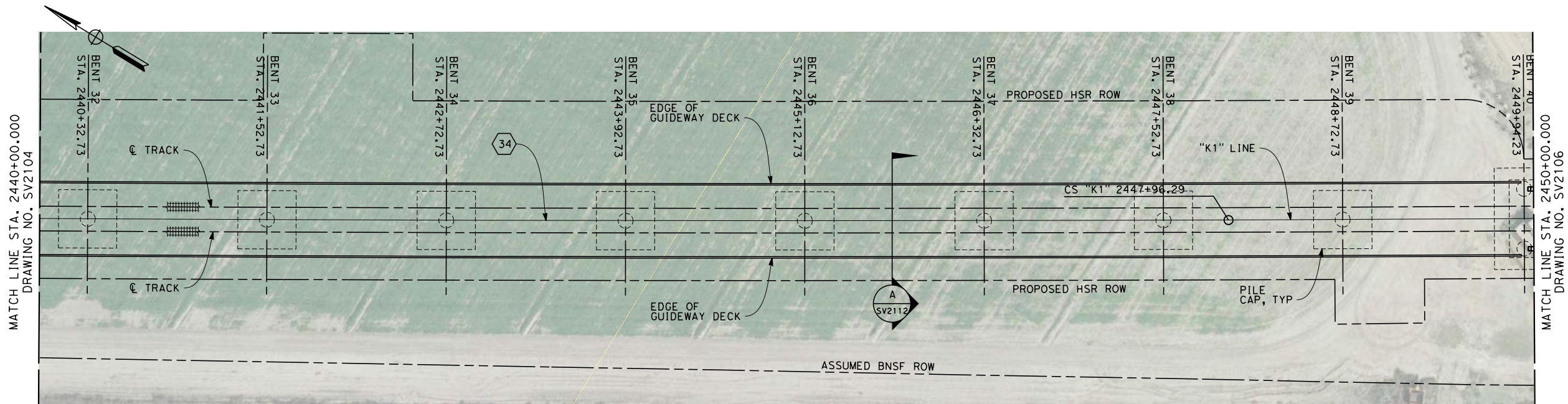
KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2104
SCALE AS SHOWN
SHEET NO. 5 OF 14

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

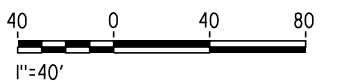
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

- ③ R = 85000.00'
- Δ = 0° 50' 01.6"
- T = 618.5'
- L = 1236.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

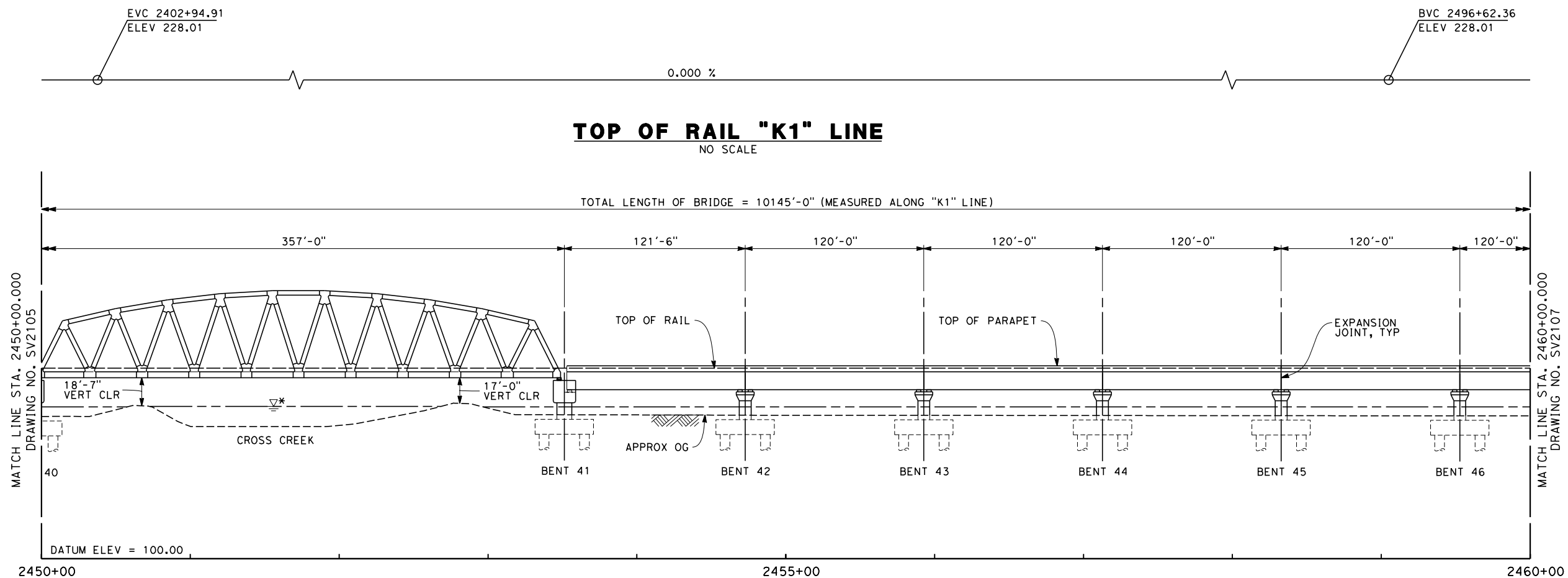


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

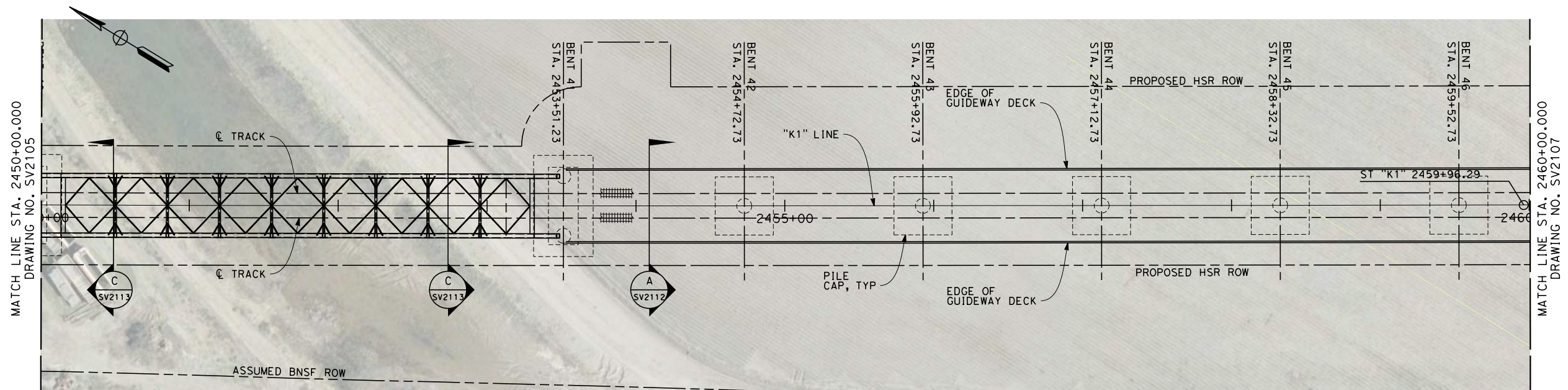
KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2105
SCALE AS SHOWN
SHEET NO. 6 OF 14

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ELEVATION
SCALE 1" = 40'



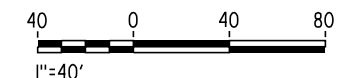
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

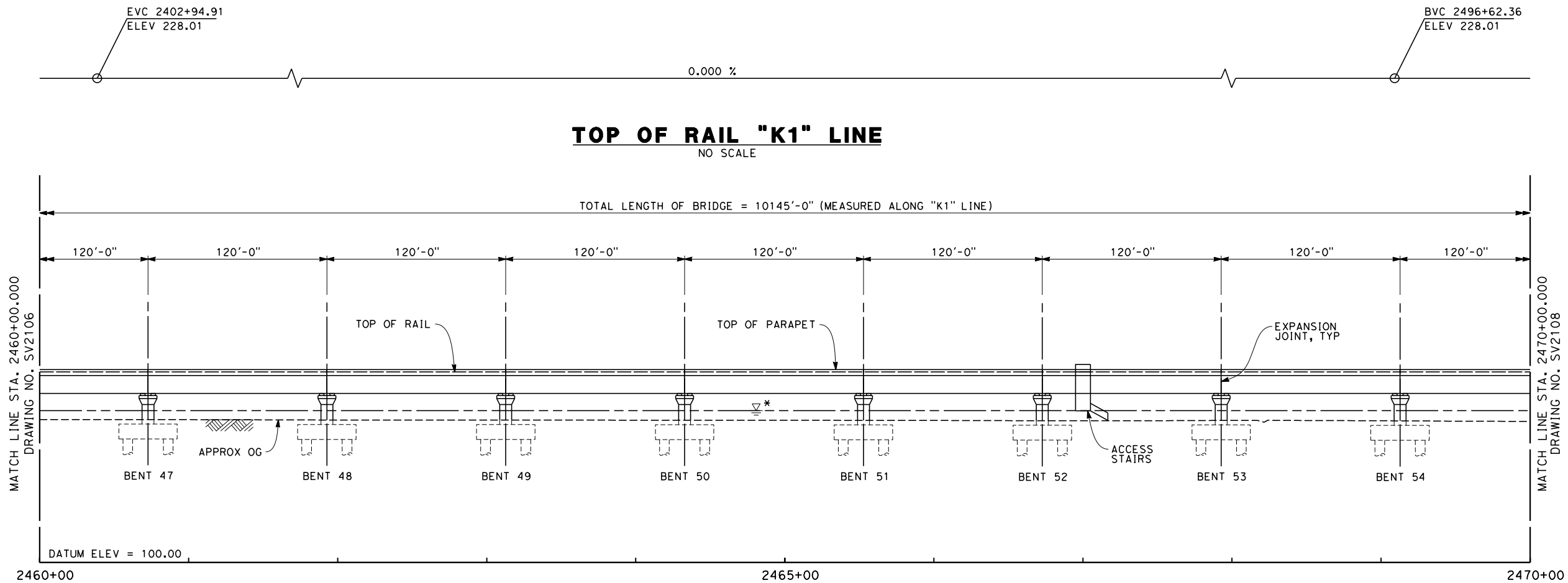


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

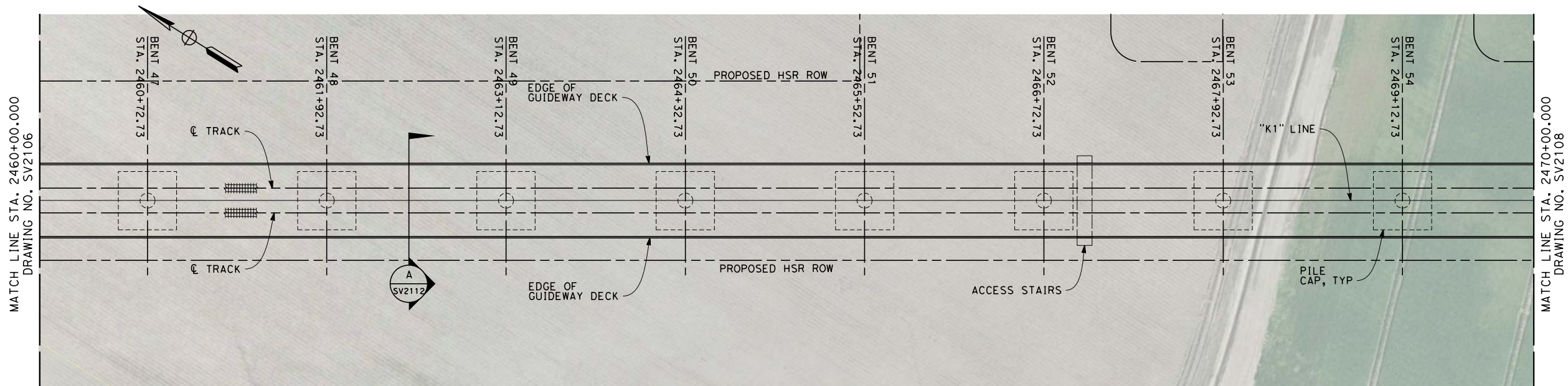
KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2106
SCALE AS SHOWN
SHEET NO. 7 OF 14

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ELEVATION
SCALE 1" = 40'



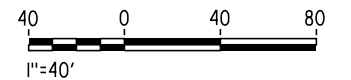
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

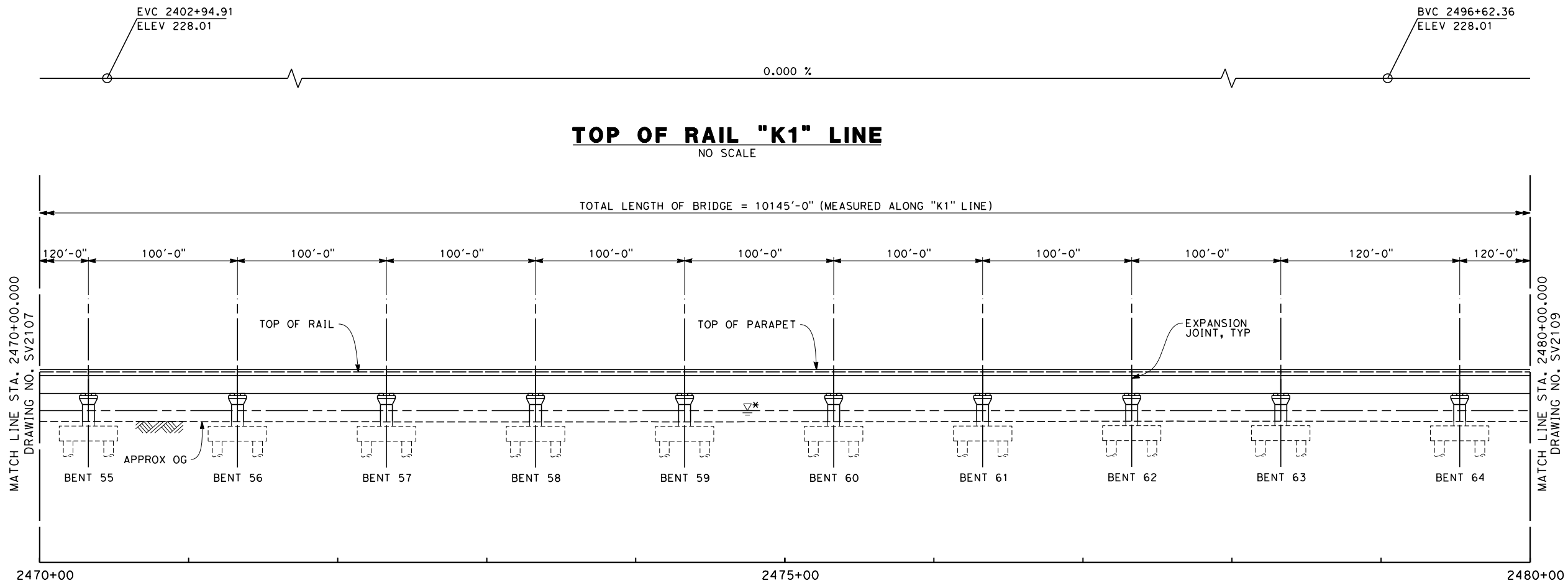


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

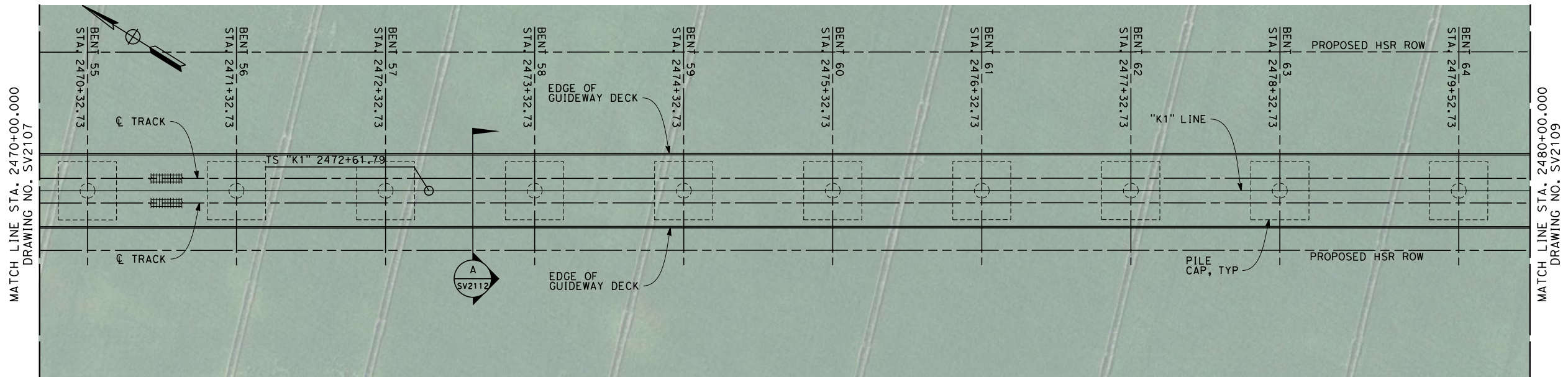
KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2107
SCALE AS SHOWN
SHEET NO. 8 OF 14

Nadine.Hutton 12/12/2013 10:39:38 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2108.dgn



ELEVATION
SCALE 1" = 40'



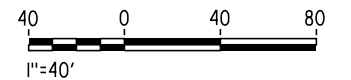
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

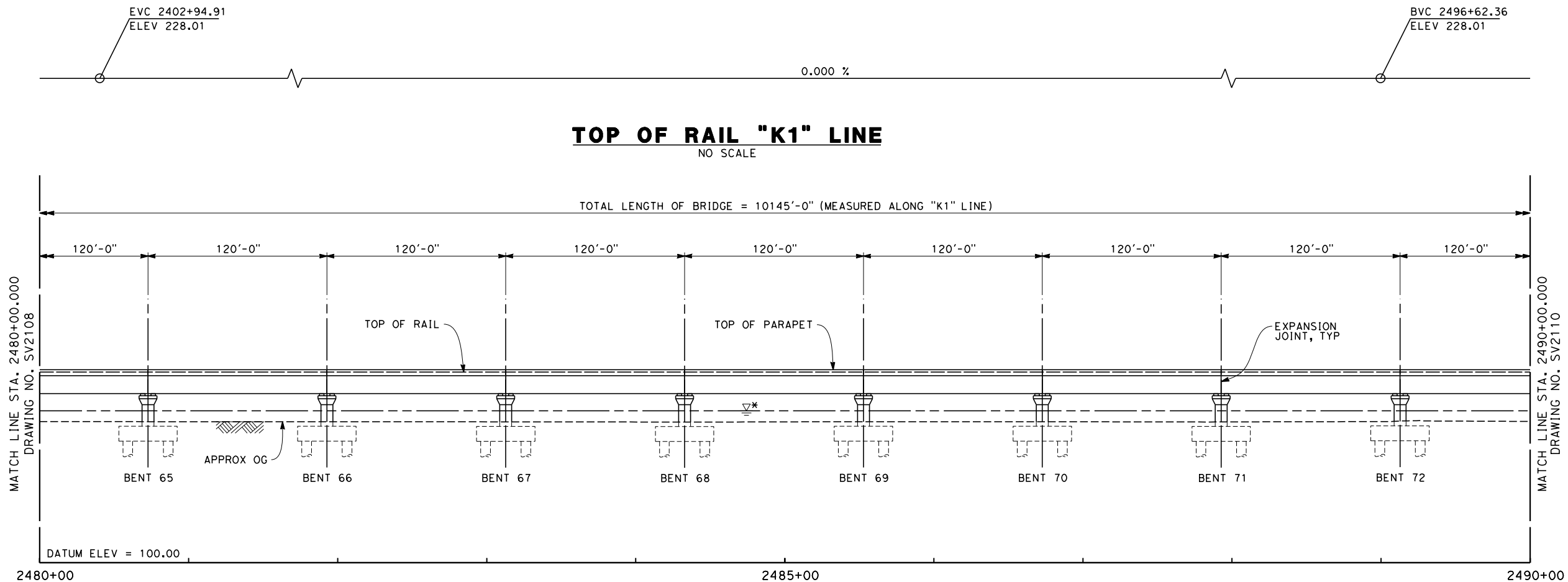


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

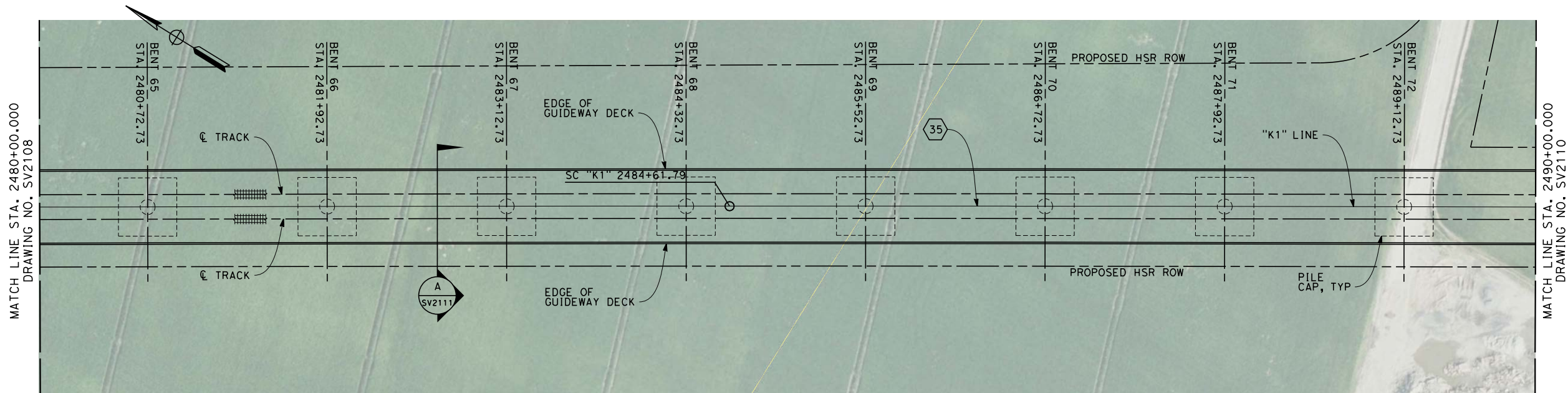
KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2108
SCALE AS SHOWN
SHEET NO. 9 OF 14

Nadine.Hutton 12/12/2013 10:40:03 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2109.dgn



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

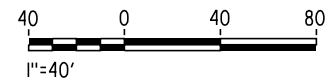
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

③
R = 170000.00'
Δ = 01° 14' 39.4"
T = 1846.0'
L = 3691.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



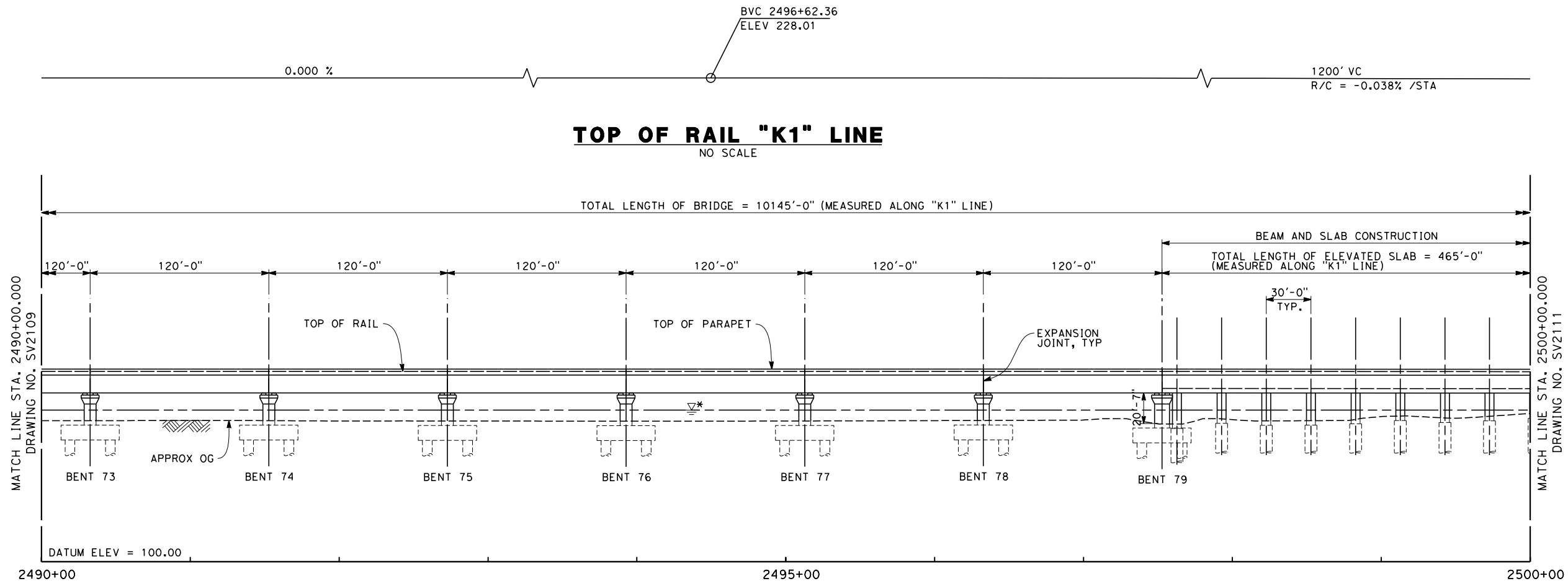
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
PLAN AND ELEVATION

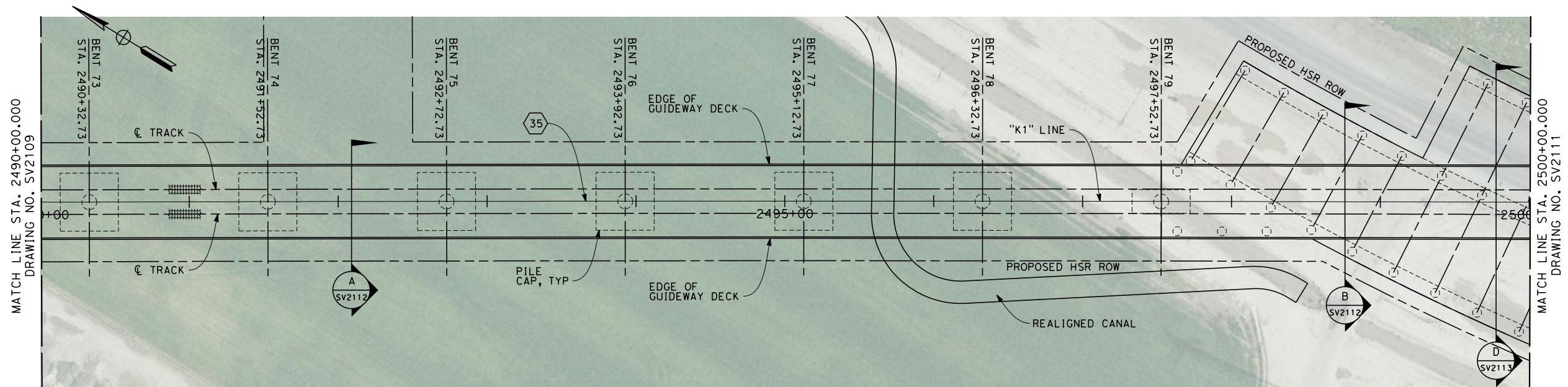
CONTRACT NO. HSR 06-0003
DRAWING NO. SV2109
SCALE AS SHOWN
SHEET NO. 10 OF 14

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Nadine.Hutton



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

35

R = 170000.00'

Δ = 01° 14' 39.4"

T = 1846.0'

L = 3691.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

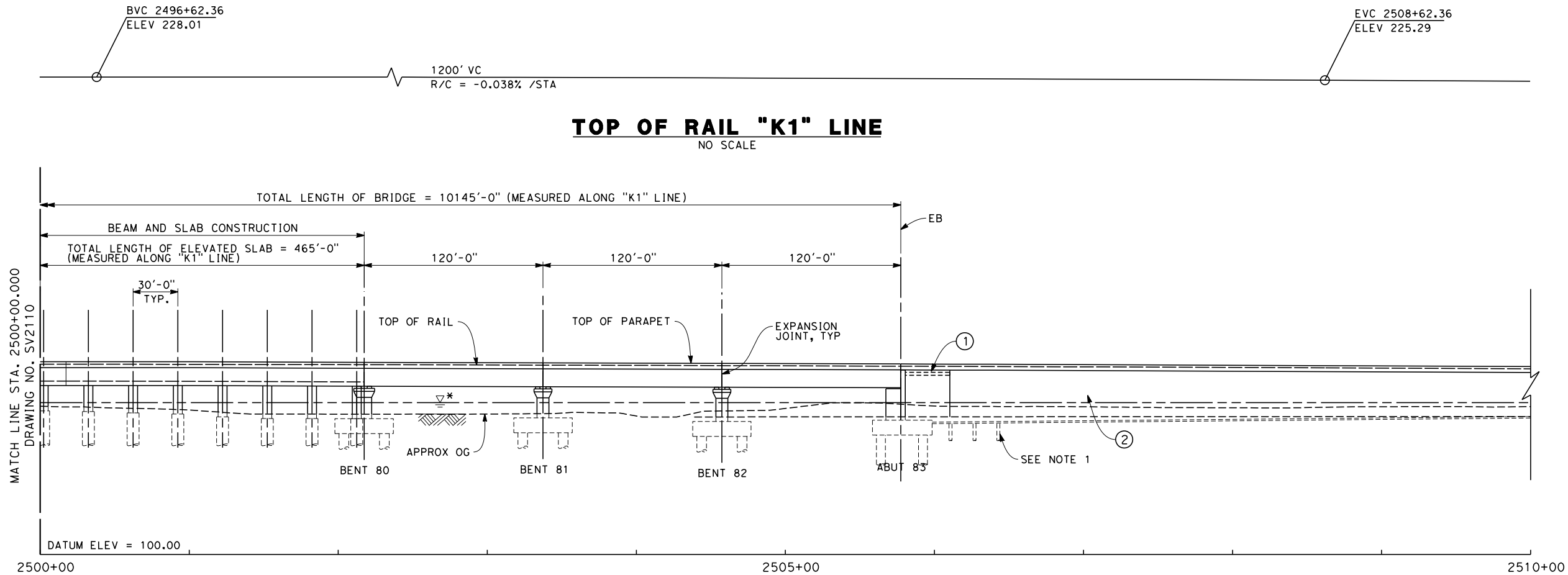


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

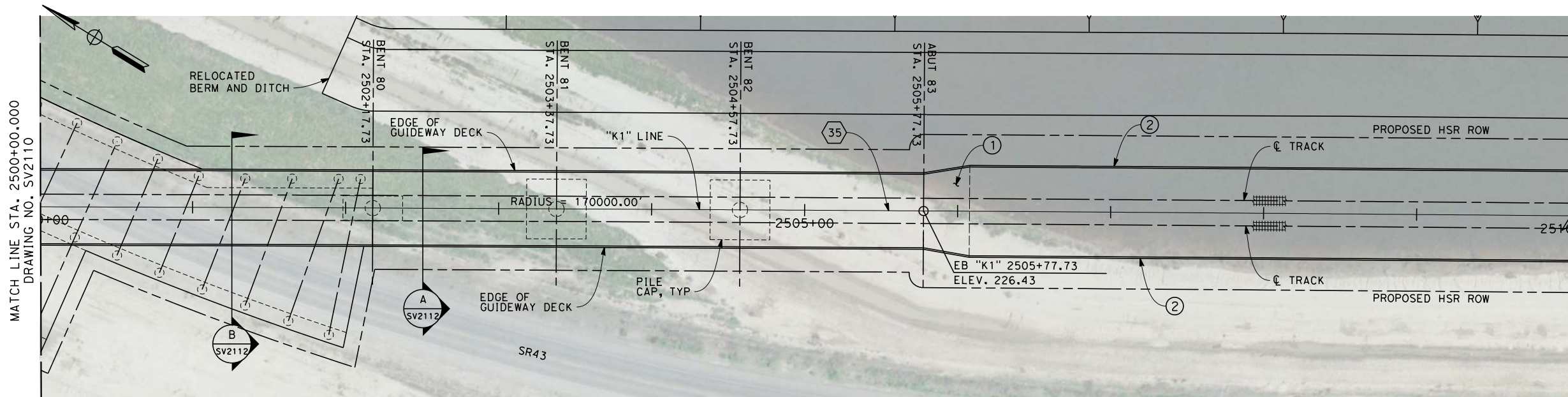
KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2110
SCALE AS SHOWN
SHEET NO. 11 OF 14

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

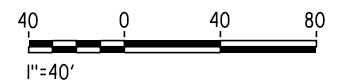
35

R = 170000.00'

Δ = 01° 14' 39.4"

T = 1846.0'

L = 3691.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

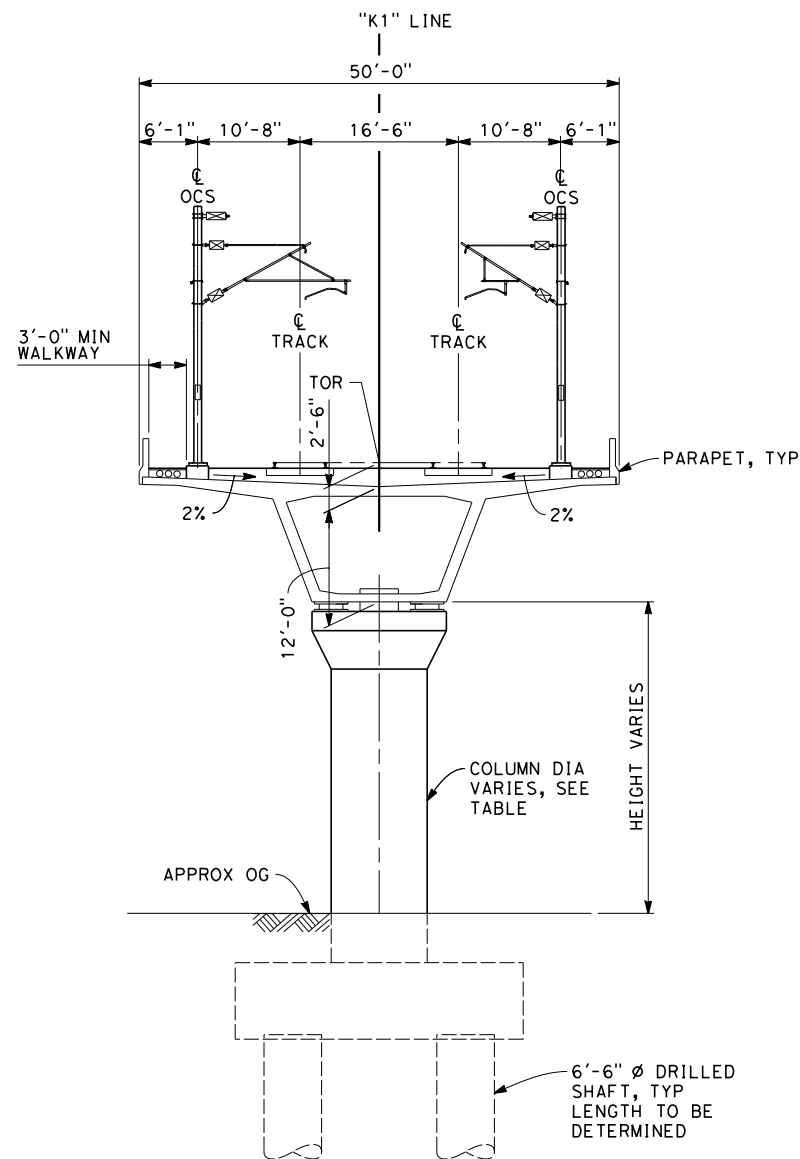


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2111
SCALE AS SHOWN
SHEET NO. 12 OF 14

Nadine.Hutton 12/12/2013 10:40:43 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2112.dgn

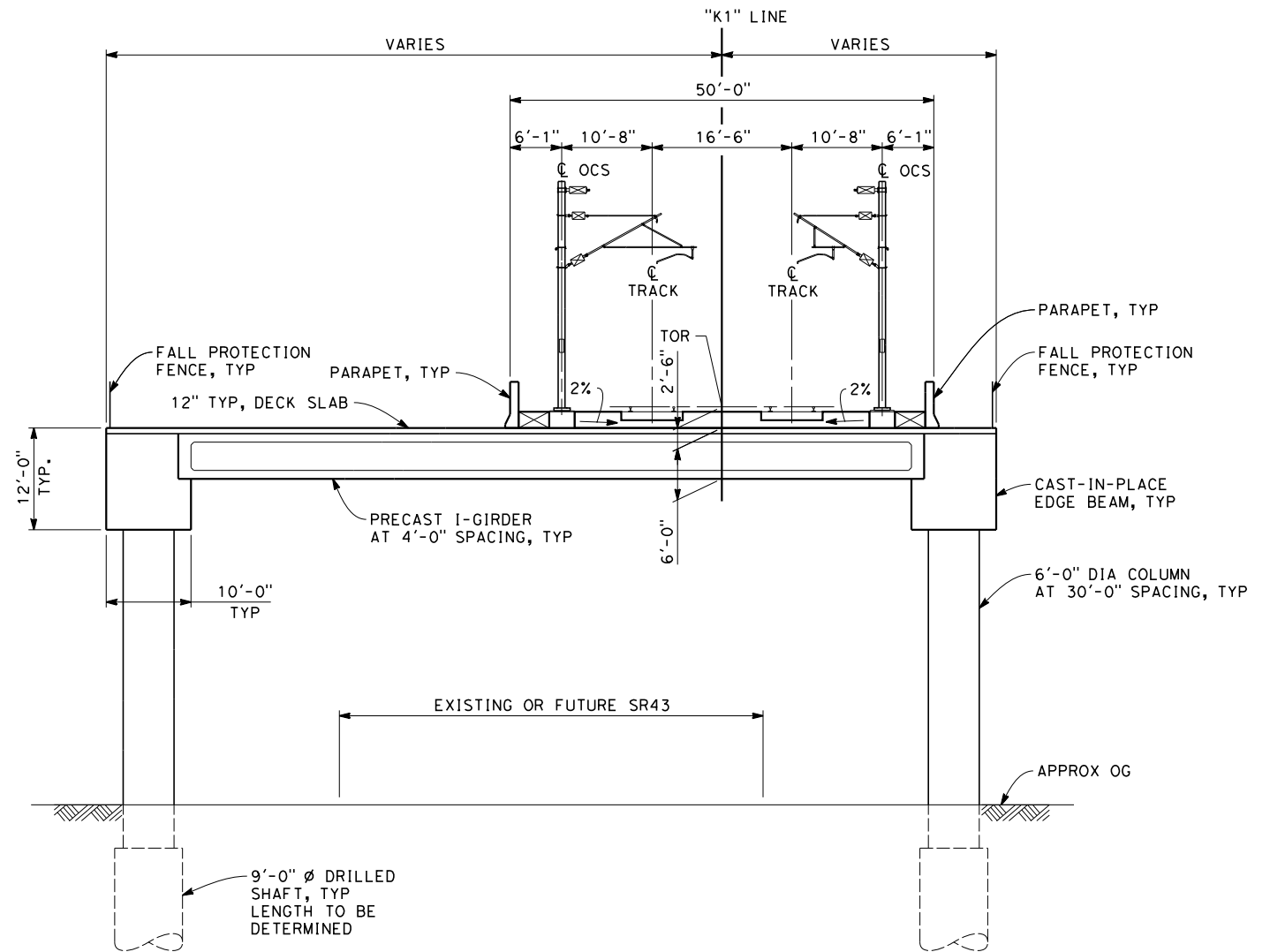


COLUMN DIAMETERS	
HEIGHT TO SOFFIT	DIAMETER
0-20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT

SECTION A

SCALE: 1"=10'

STA. 2404+33 THROUGH 2449+94
STA. 2453+51 THROUGH 2497+53
STA. 2502+18 THROUGH 2505+78



SECTION B

SCALE: 1"=10'

STA. 2497+53 THROUGH 2499+50
STA. 2501+00 THROUGH 2502+18

REV	DATE	BY	CHK	APP	DESCRIPTION

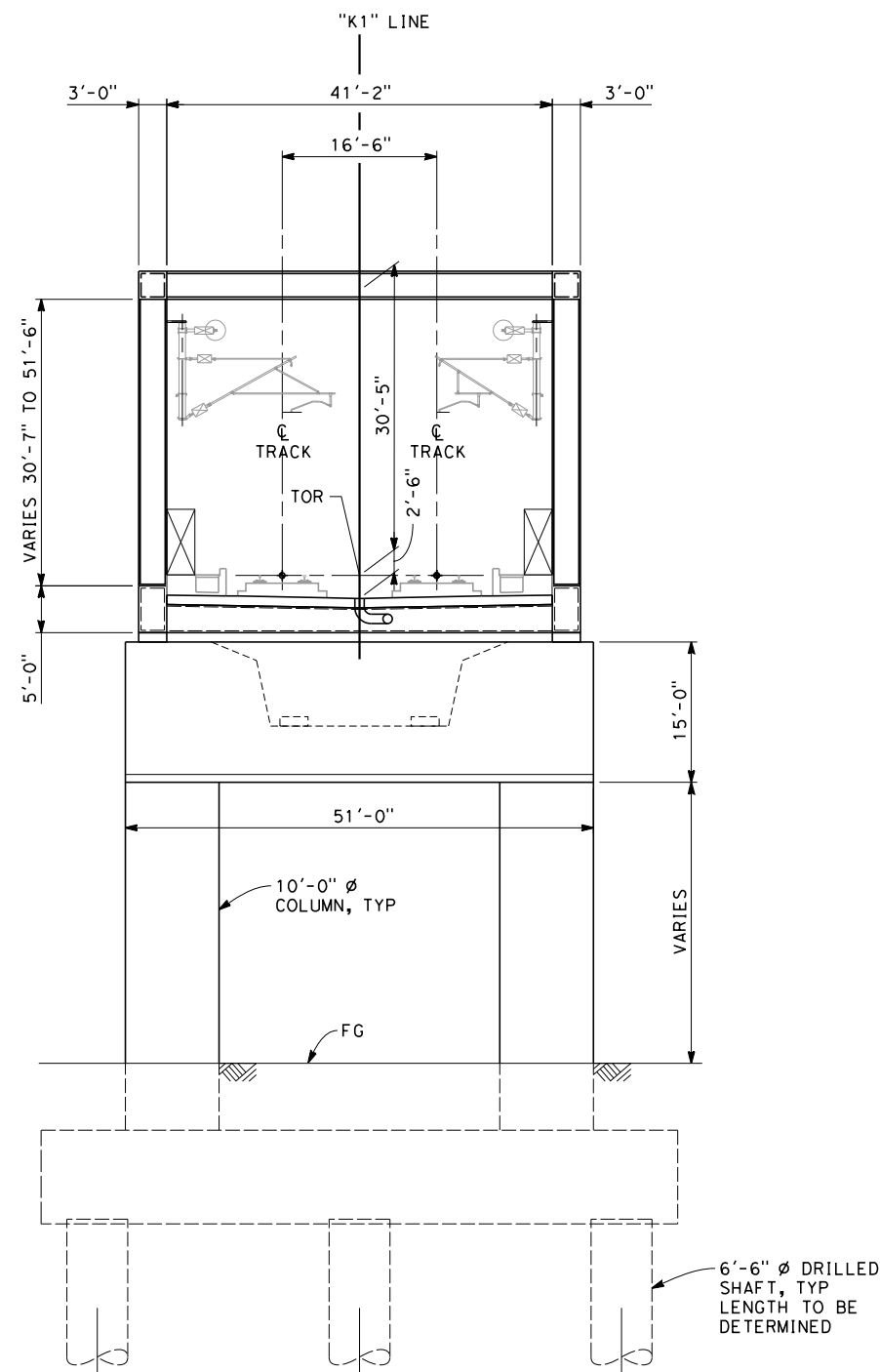
DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
TYPICAL SECTIONS

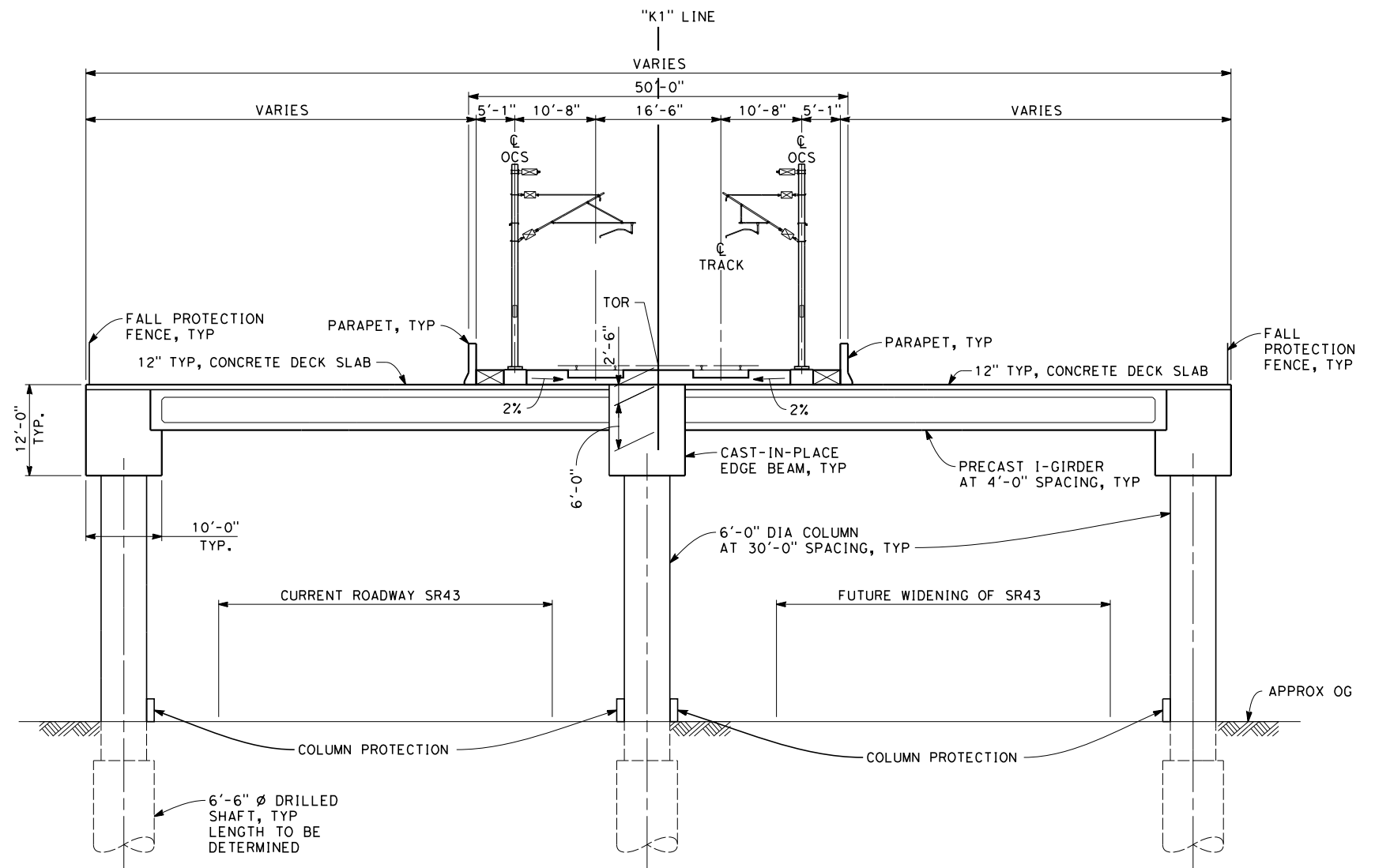
CONTRACT NO. HSR 06-0003
DRAWING NO. SV2112
SCALE AS SHOWN
SHEET NO. 13 of 14



SECTION C

SCALE: 1"=10'

STA. 2449+94 THROUGH 2453+51



SECTION D

SCALE: 1"=10'

STA. 2499+50 THROUGH 2501+00

Nadine.Hutton 12/12/2013 10:40:47 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103429\SV2113.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	M. FISHER
DRAWN BY	F. PALERMO
CHECKED BY	A. ARMSTRONG
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K1
CROSS CREEK VIADUCT
TYPICAL SECTIONS

CONTRACT NO.	HSR 06-0003
DRAWING NO.	SV2113
SCALE	AS SHOWN
SHEET NO.	14 OF 14

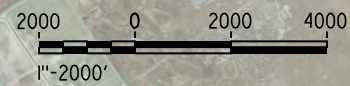
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LEGEND

— EXISTING FREIGHT RAILROAD

— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
IDAHO AVE UNDERPASS
KEY MAP

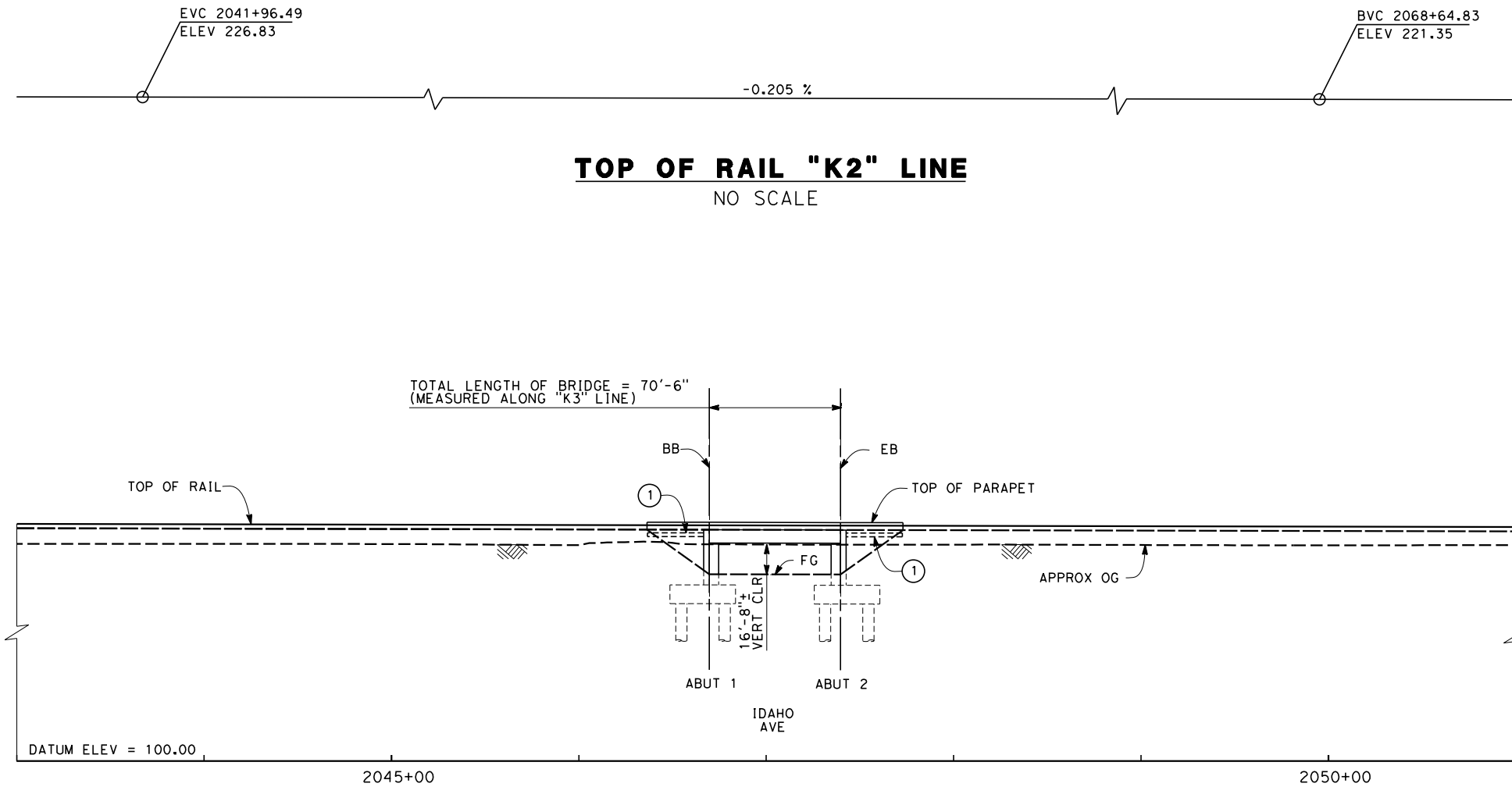
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HSR 06-0003

DRAWING NO.
SV2120

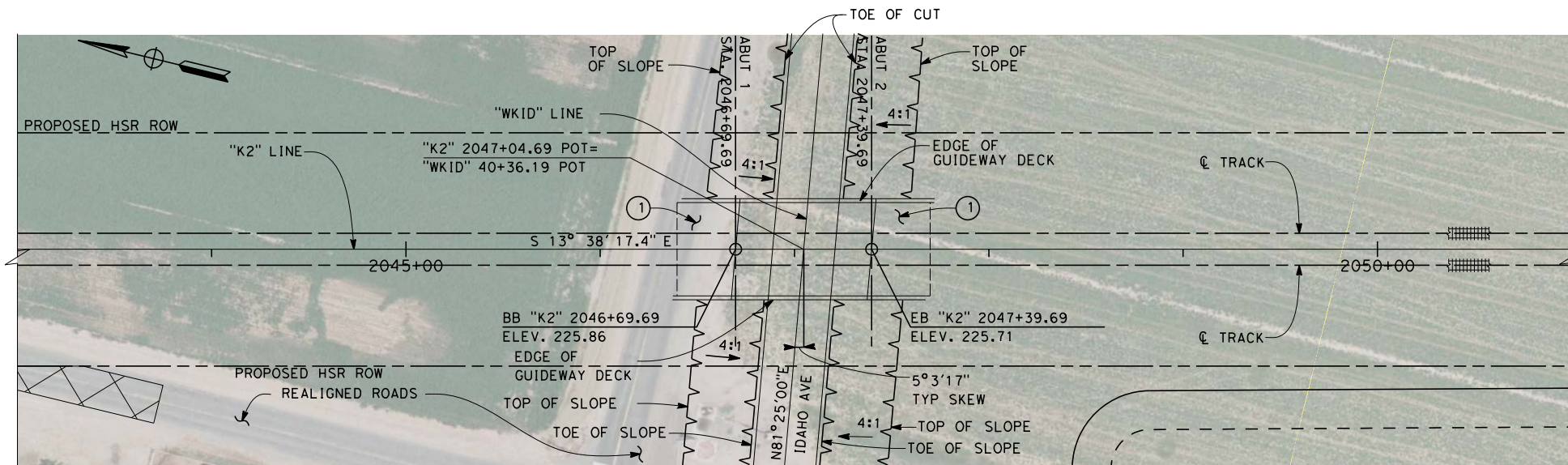
SCALE
AS SHOWN

SHEET NO.
1 OF 2

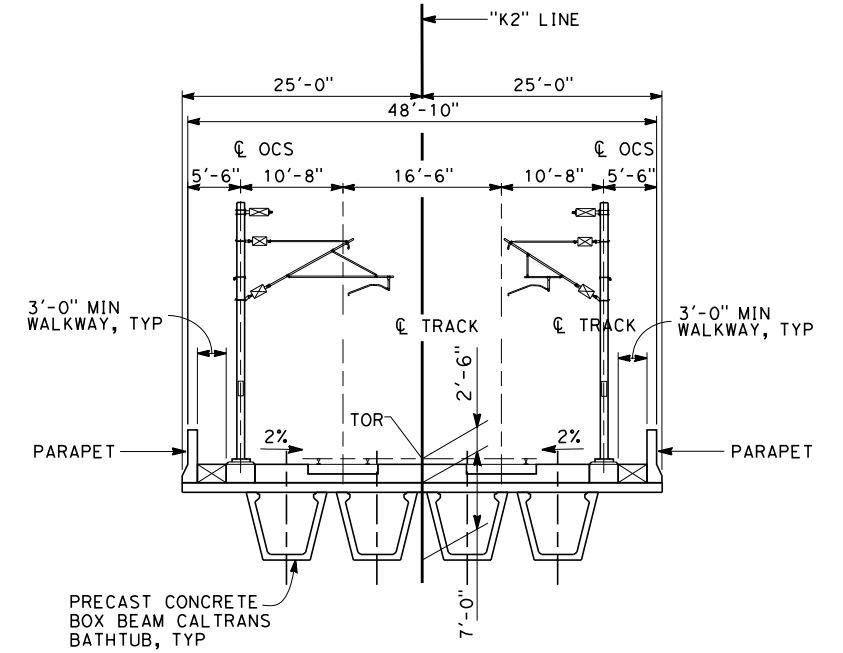
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ELEVATION
SCALE: 1"=40'



PLAN
SCALE: 1"=40'



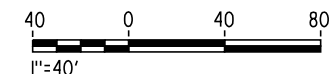
TYPICAL SECTION
SCALE: 1"=10'

NOTES:

1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY J. VALENZUELA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K2 IDAHO AVE UNDERPASS PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2121
SCALE AS SHOWN
SHEET NO. 2 OF 2

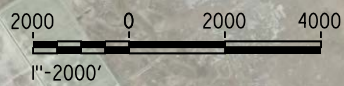
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LEGEND

— EXISTING FREIGHT RAILROAD

— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
12TH AVE UNDERPASS
KEY MAP

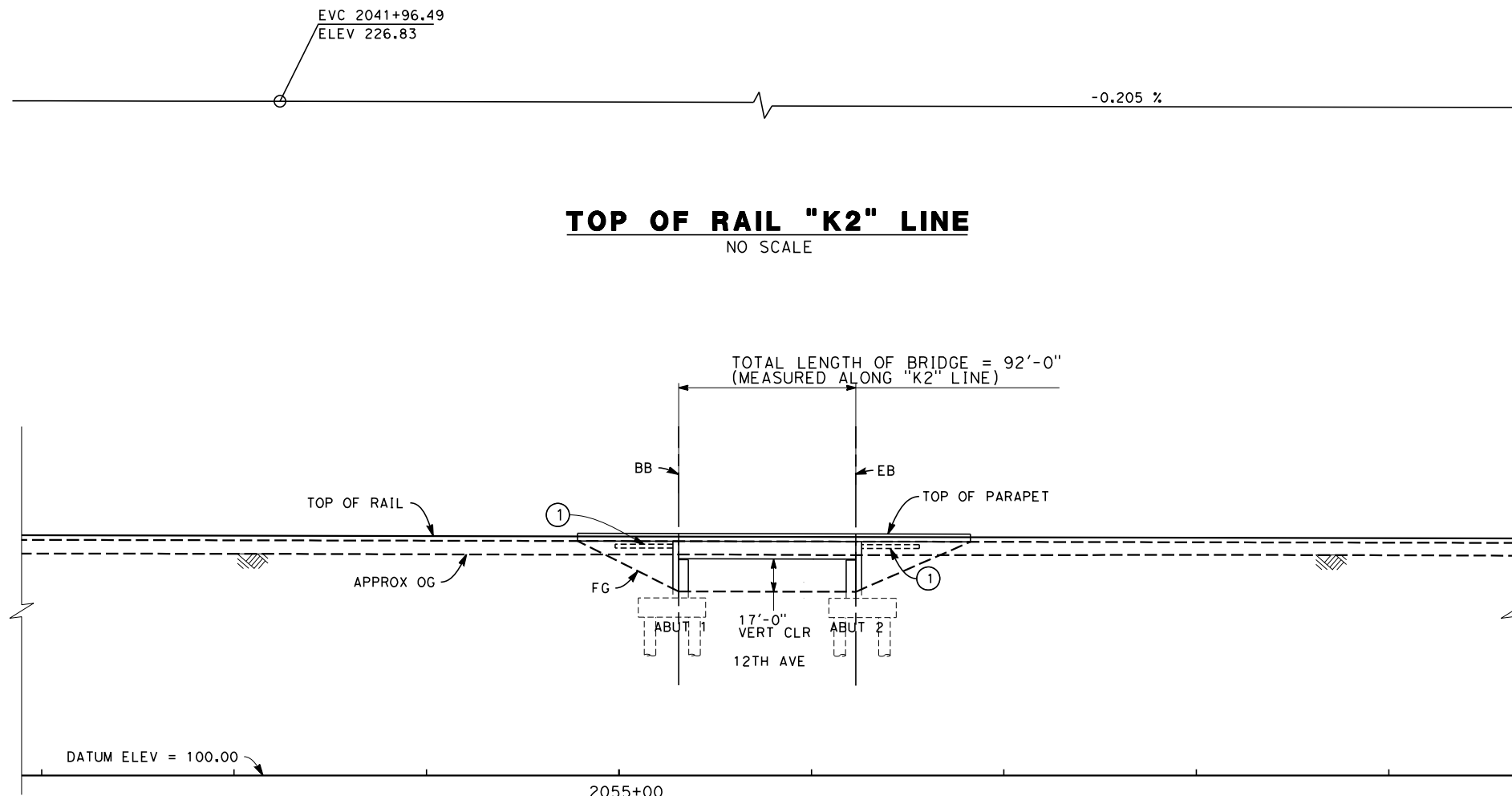
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HSR 06-0003

DRAWING NO.
SV2125

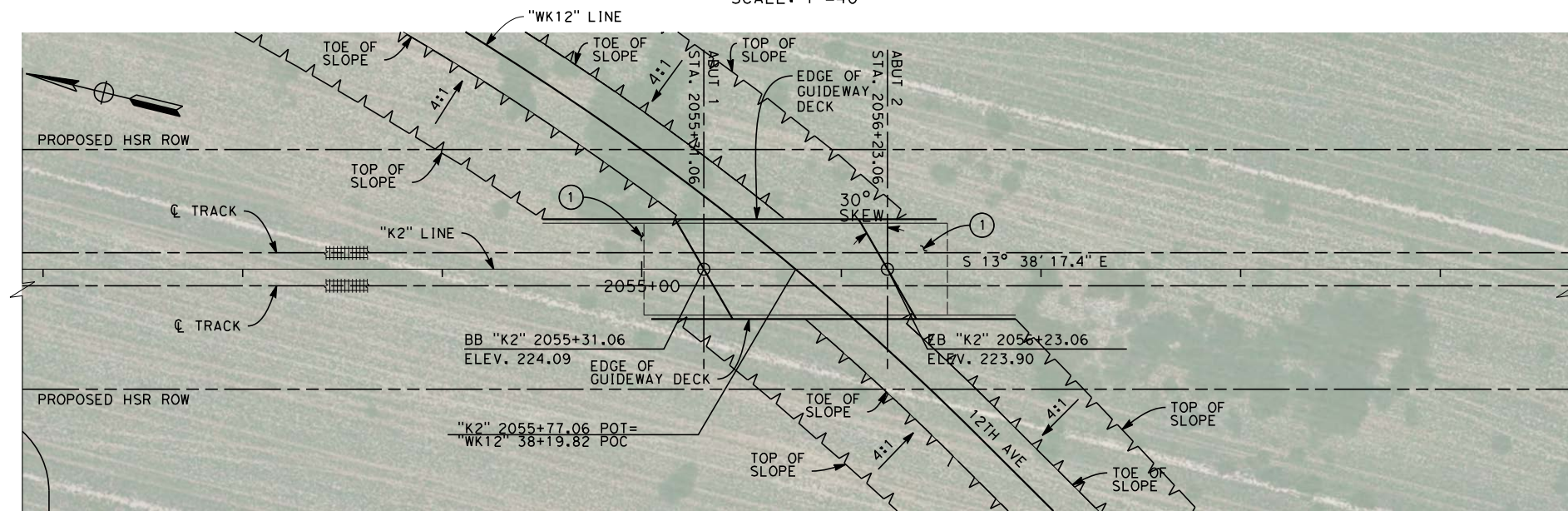
SCALE
AS SHOWN

SHEET NO.
1 OF 2

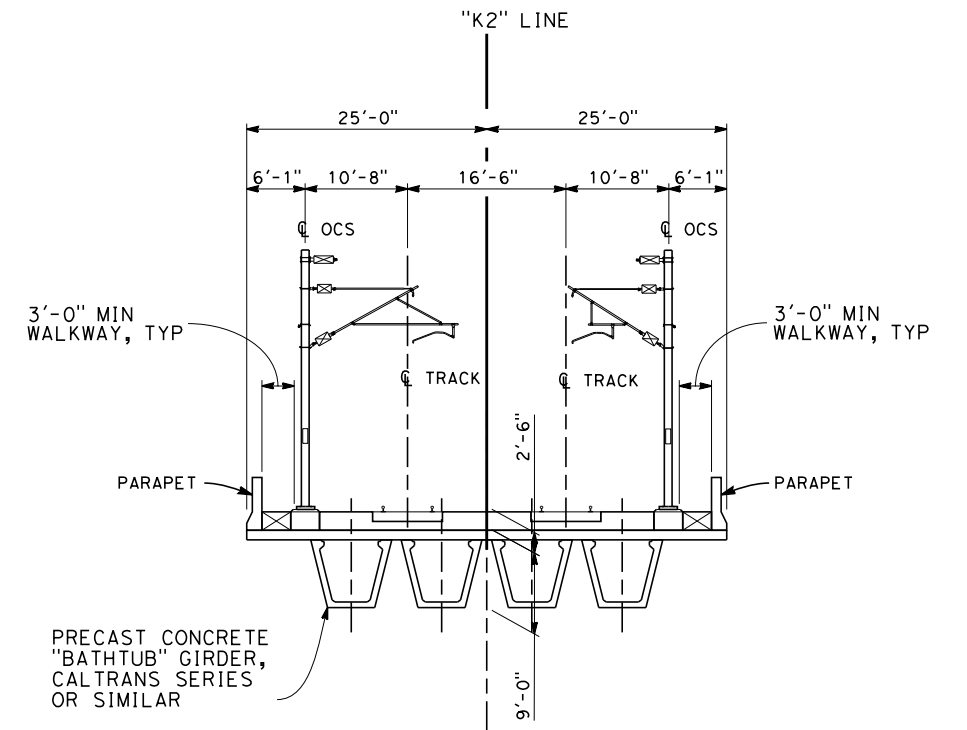
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ELEVATION
SCALE: 1"=40'



PLAN
SCALE: 1"=40'



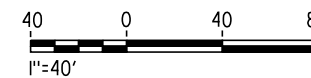
TYPICAL SECTION
SCALE: 1"=10'

NOTES:

1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY J. VALENZUELA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
12TH AVE UNDERPASS
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2126
SCALE AS SHOWN
SHEET NO. 2 OF 2

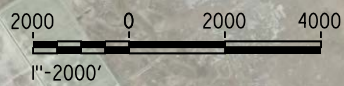
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LEGEND

— EXISTING FREIGHT RAILROAD

— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
S 11TH AVE UNDERPASS
KEY MAP

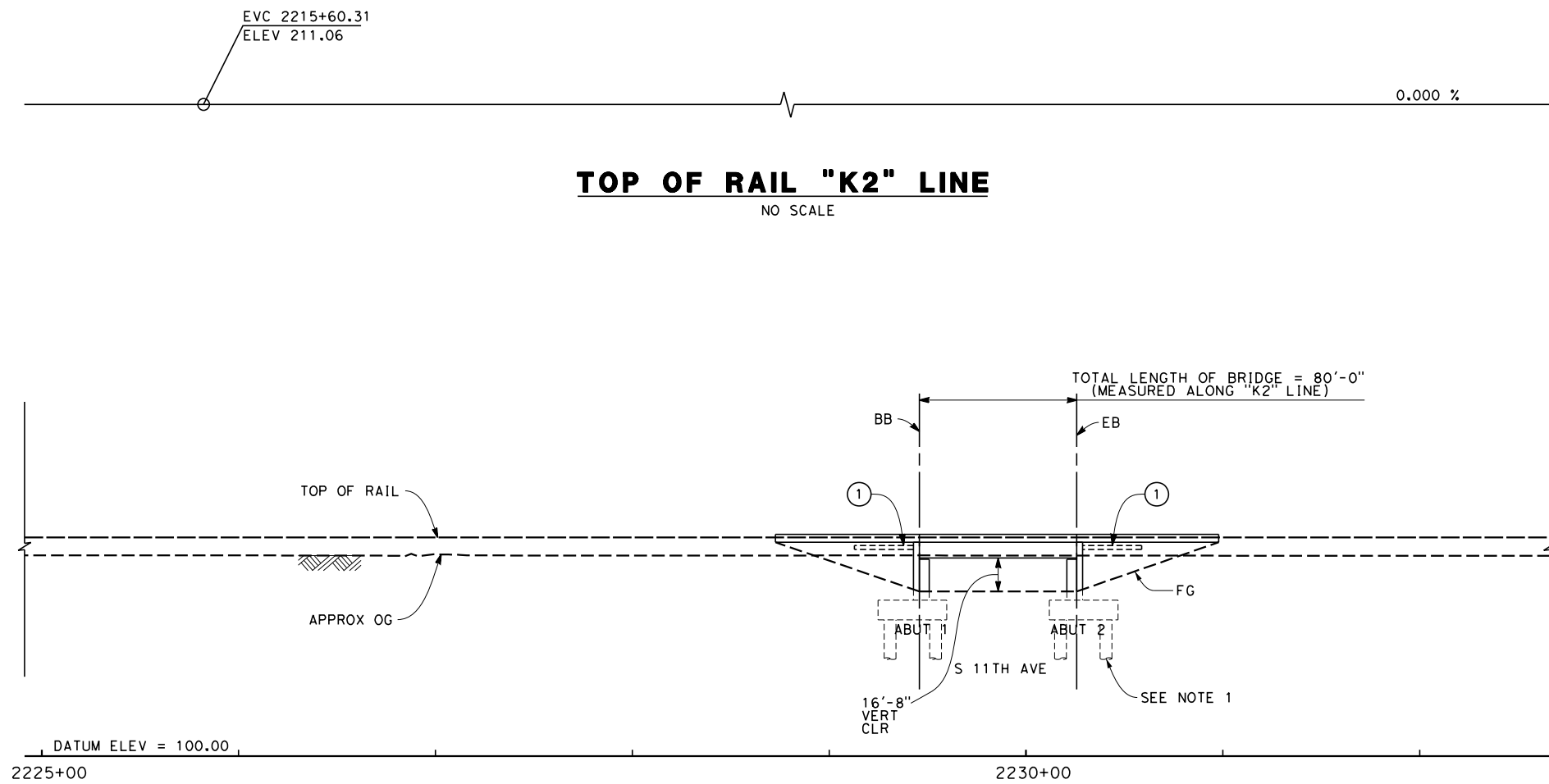
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HSR 06-0003

DRAWING NO.
SV2130

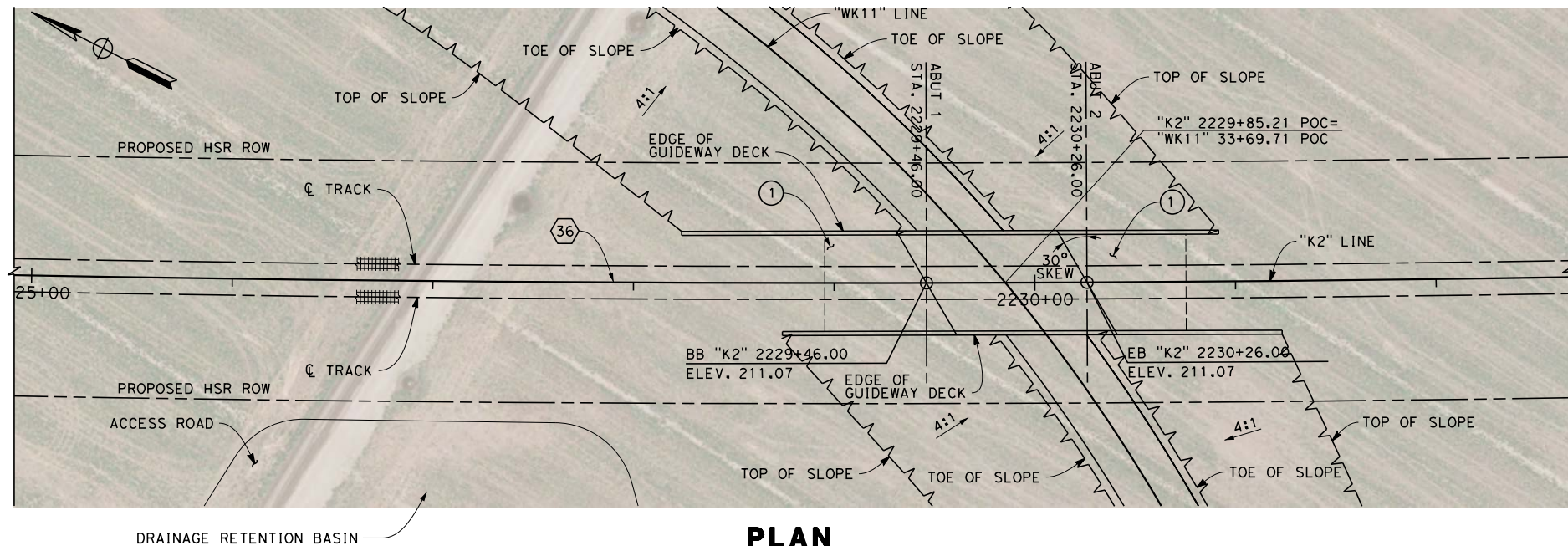
SCALE
AS SHOWN

SHEET NO.
1 OF 2

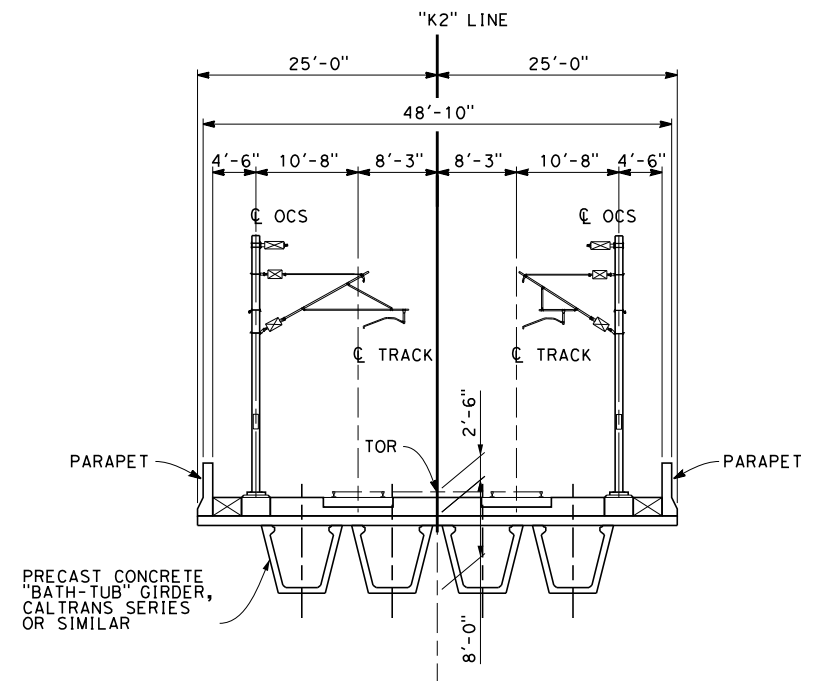
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ELEVATION
SCALE: 1"=40'



PLAN
SCALE: 1"=40'



TYPICAL SECTION
SCALE: 1"=10'

CURVE DATA

36

R = 22008.25'
Δ = 21° 59' 18.7"
T = 4275.7'
L = 8446.2'

- NOTES:
1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
 2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

- LEGEND:
- ① STRUCTURE APPROACH SLAB
- INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
S 11TH AVE UNDERPASS
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2131
SCALE AS SHOWN
SHEET NO. 2 OF 2

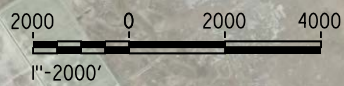
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LEGEND

— EXISTING FREIGHT RAILROAD

— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
KENT AVE UNDERPASS
KEY MAP

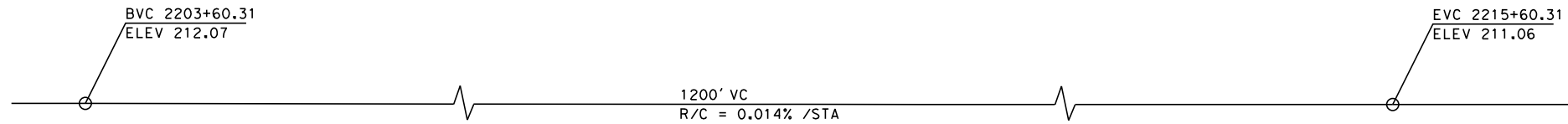
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HSR 06-0003

DRAWING NO.
SV2135

SCALE
AS SHOWN

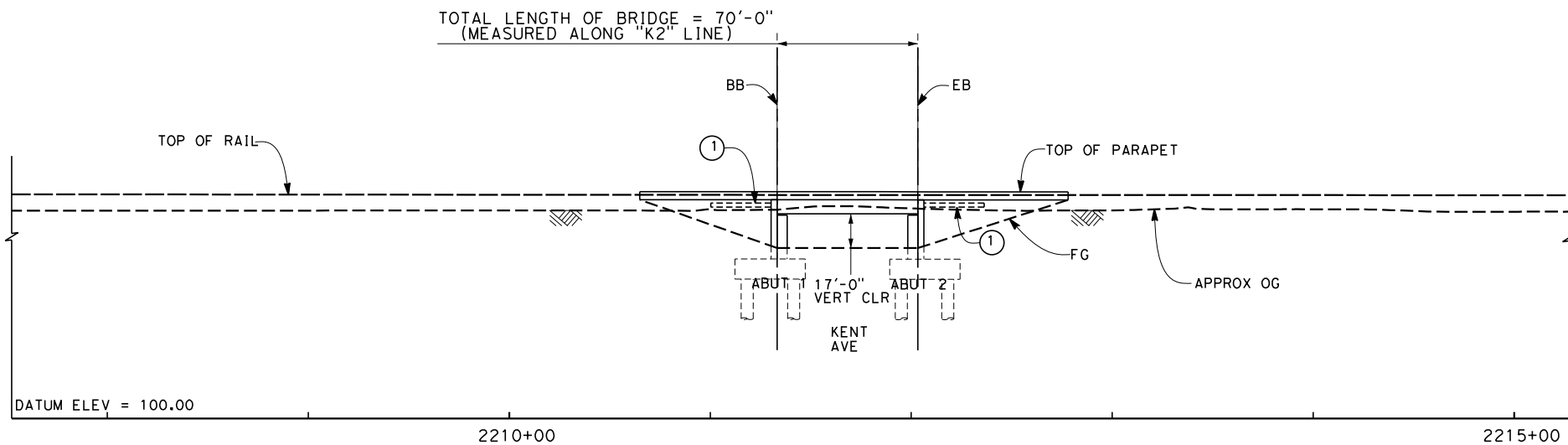
SHEET NO.
1 OF 2

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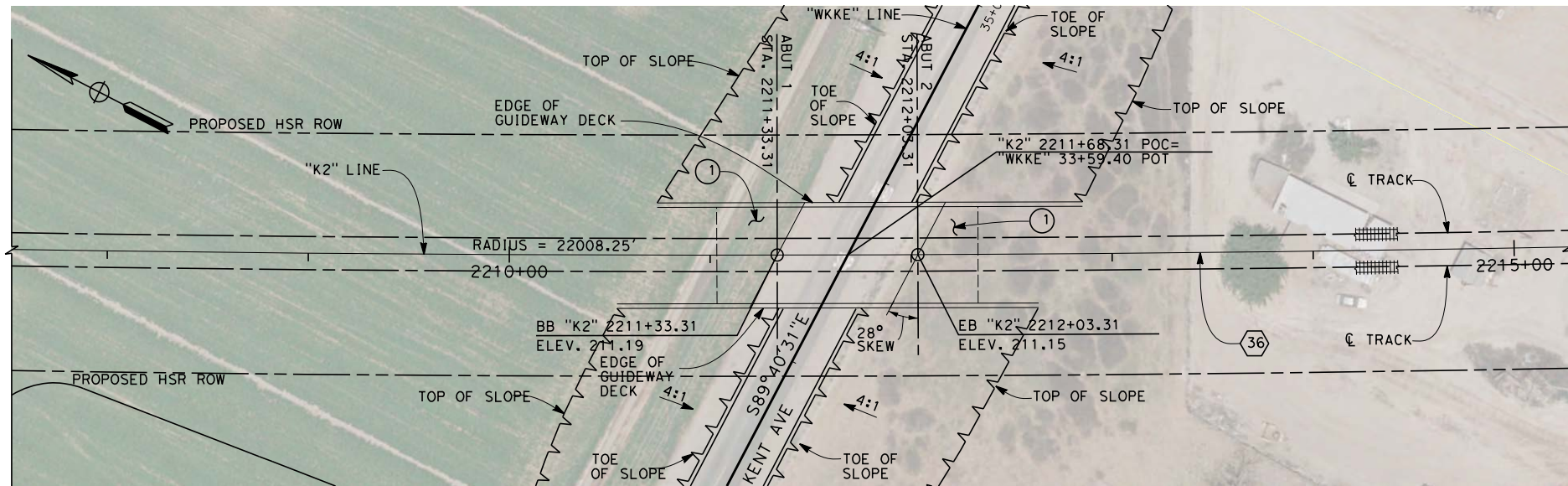
TOP OF RAIL "K2" LINE

NO SCALE



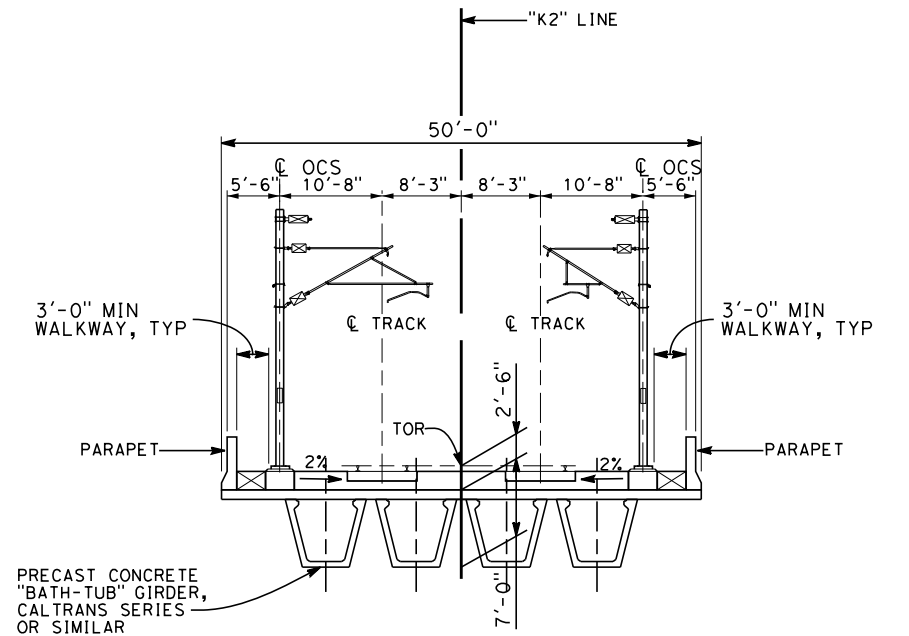
ELEVATION

SCALE: 1"=40'



PLAN

SCALE: 1"=40'



TYPICAL SECTION

SCALE: 1"=10'

CURVE DATA



R = 22008.25'
Δ = 21° 59' 18.7"
T = 4275.7'
L = 8446.2'

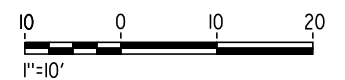
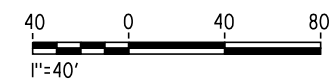
NOTES:

1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

LEGEND:

① STRUCTURE APPROACH SLAB

INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY J. VALENZUELA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K2 KENT AVE UNDERPASS PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2136
SCALE AS SHOWN
SHEET NO. 2 OF 2

Nadine.Hutton 12/12/2013 10:20:11 PM CAHSR-r1.tbl PDF_full_black-L_200dpi.ctb \\pwworking\hmm\external\nadine.hutton-arup.com\d0103430\X-FB-SV-2140-K2.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

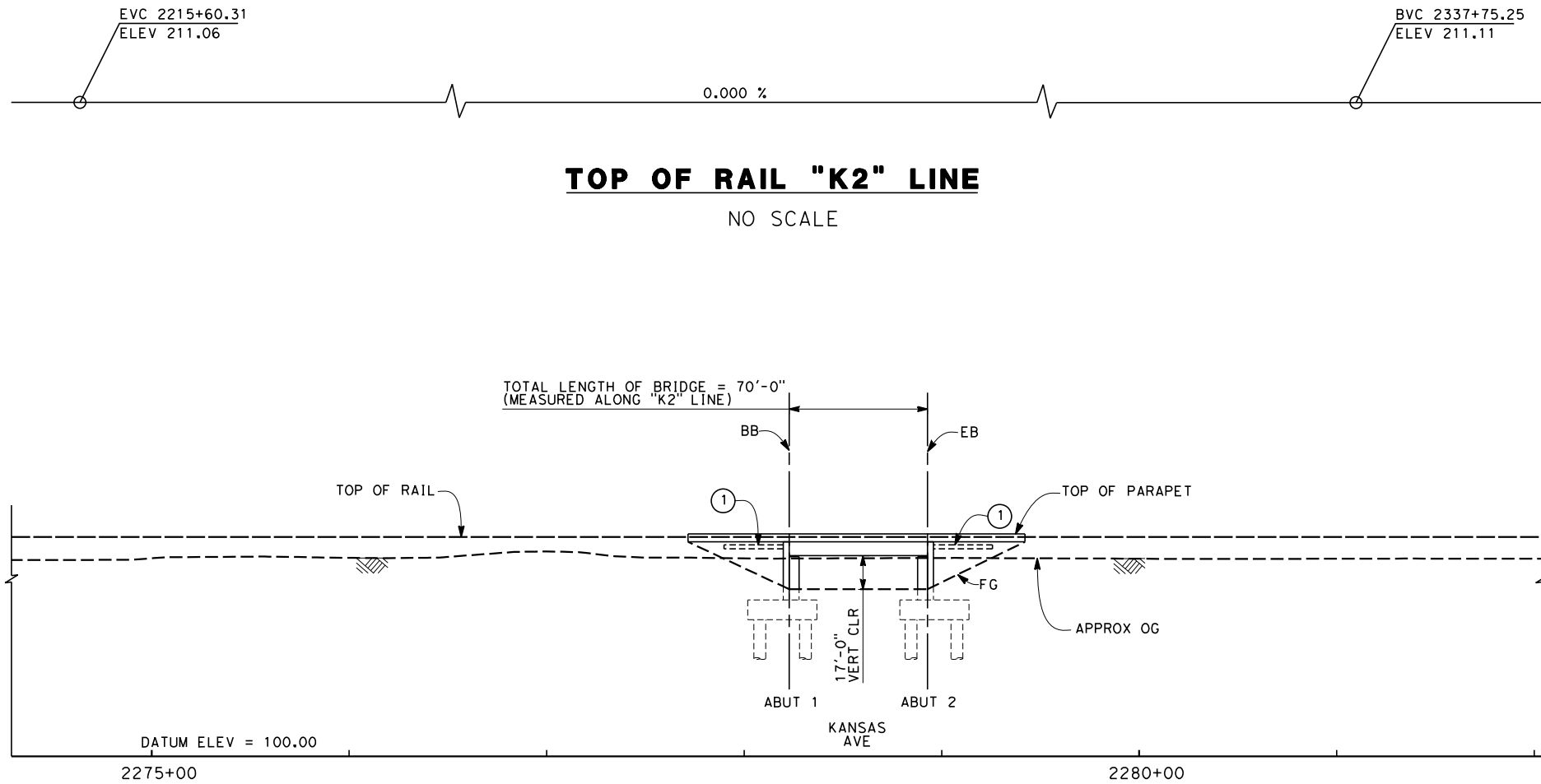
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K2
KANSAS AVE UNDERPASS
KEY MAP

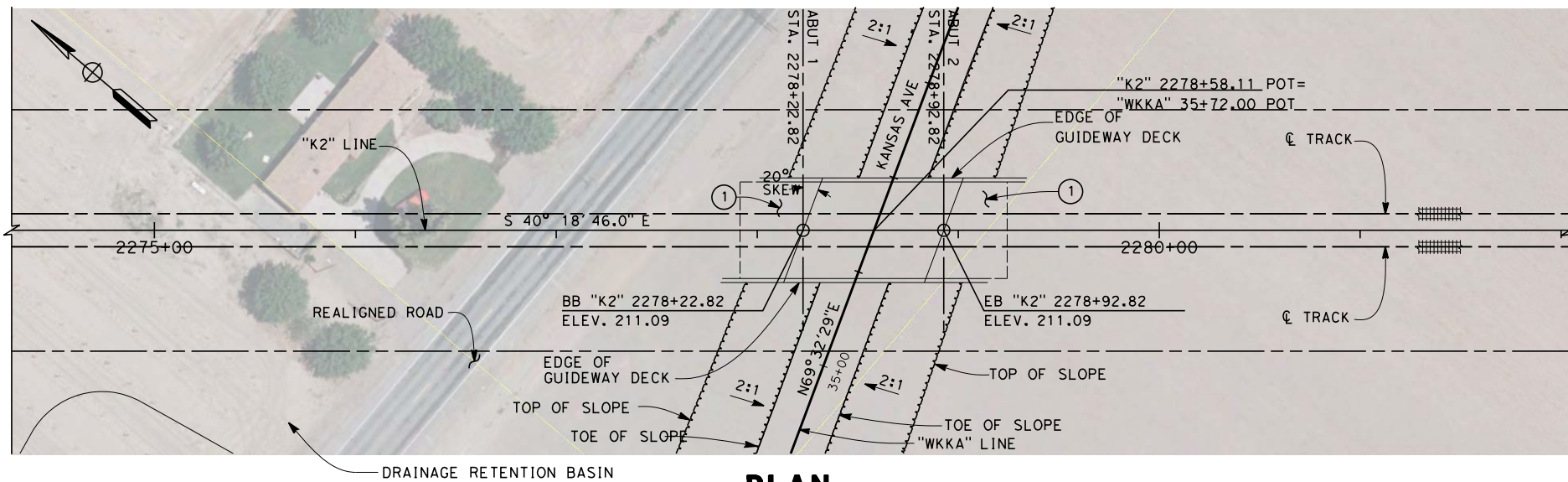
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2140
SCALE
AS SHOWN
SHEET NO.
1 OF 2

Nadine.Hutton 12/12/2013 10:20:41 PM CAHSR-r1.tbl PDF_full_black-L_200dpi.ctb \\pwworking\hmm\external\nadine.hutton-arup.com\d0103430\X-FB-SV-2141-K2.dgn



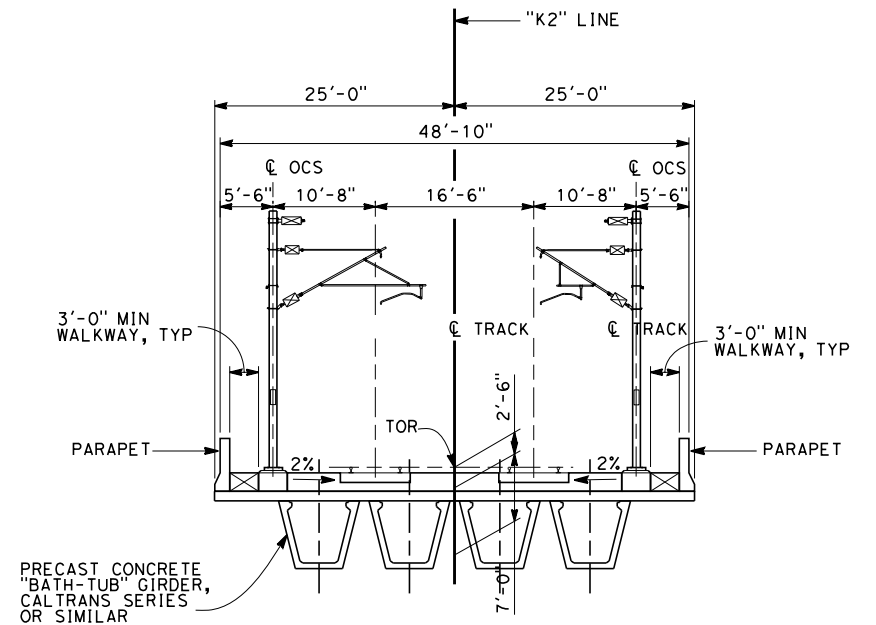
ELEVATION

SCALE: 1"=40'



PLAN

SCALE: 1"=40'



TYPICAL SECTION

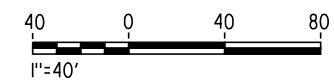
SCALE: 1"=10'

NOTES:

1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K2 KANSAS AVE UNDERPASS PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2141
SCALE AS SHOWN
SHEET NO. 2 OF 2

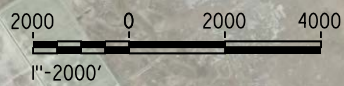
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LEGEND

— EXISTING FREIGHT RAILROAD

— PROPOSED CHST



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M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

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CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
KEY MAP

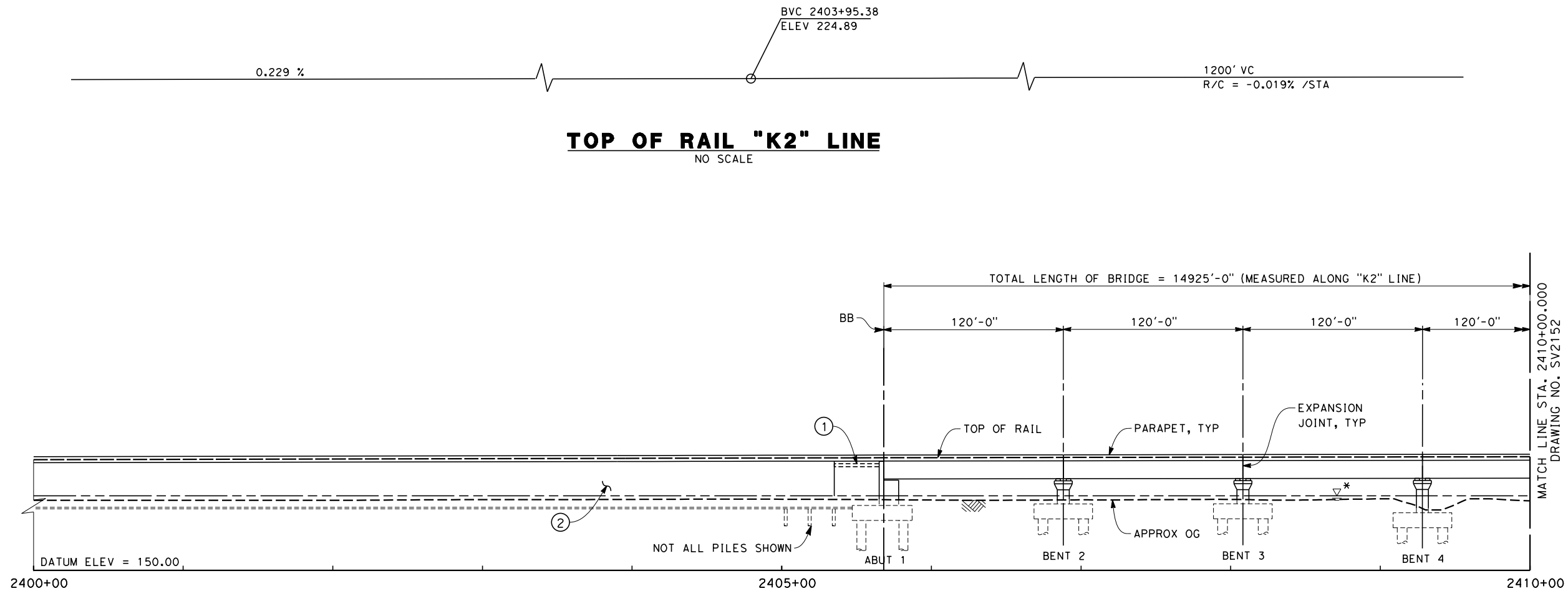
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2150

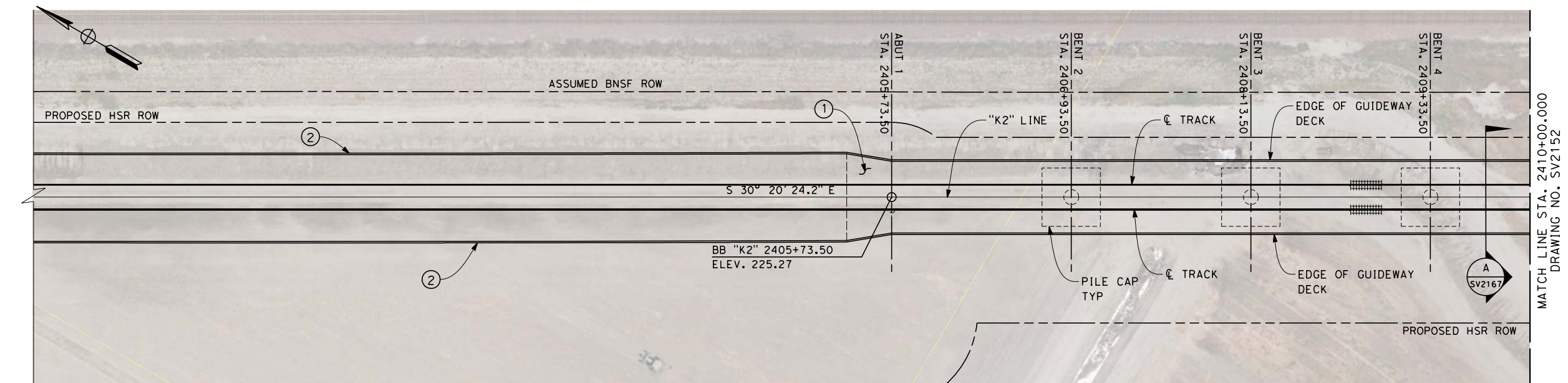
SCALE
AS SHOWN

SHEET NO.
1 OF 18

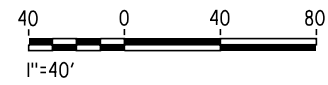
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- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

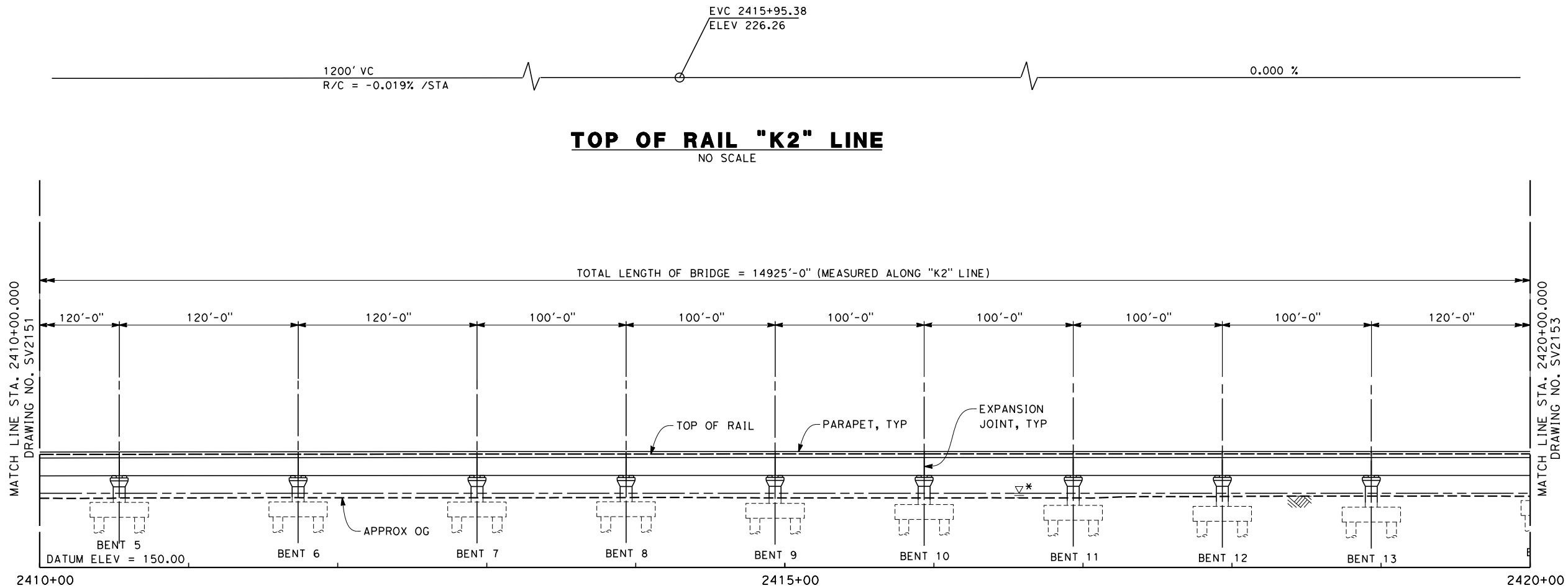
RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



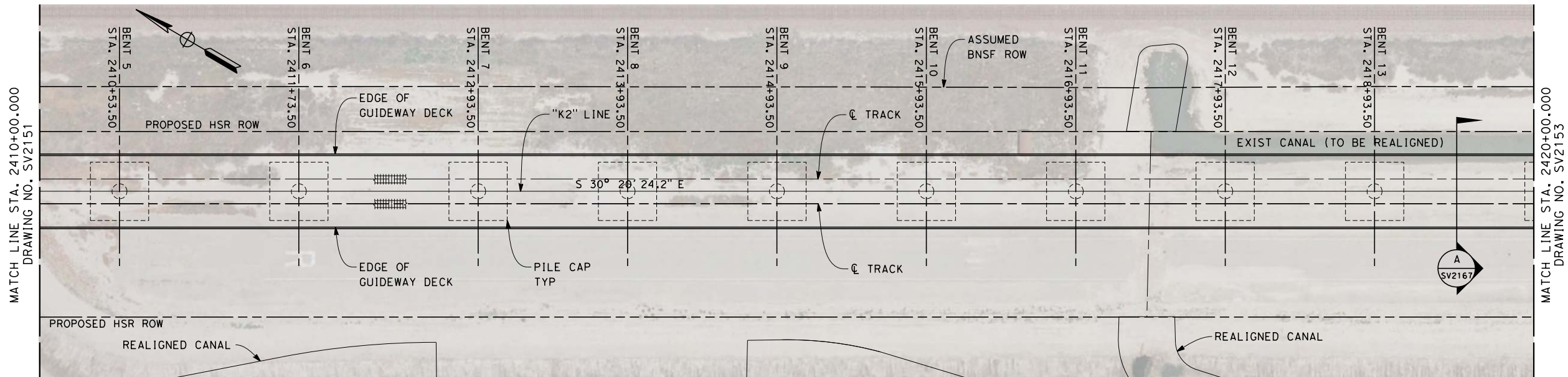
CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K2 CROSS CREEK VIADUCT PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2151
SCALE AS SHOWN
SHEET NO. 2 OF 18

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ELEVATION
SCALE 1" = 40'



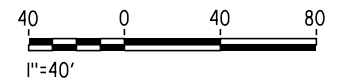
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

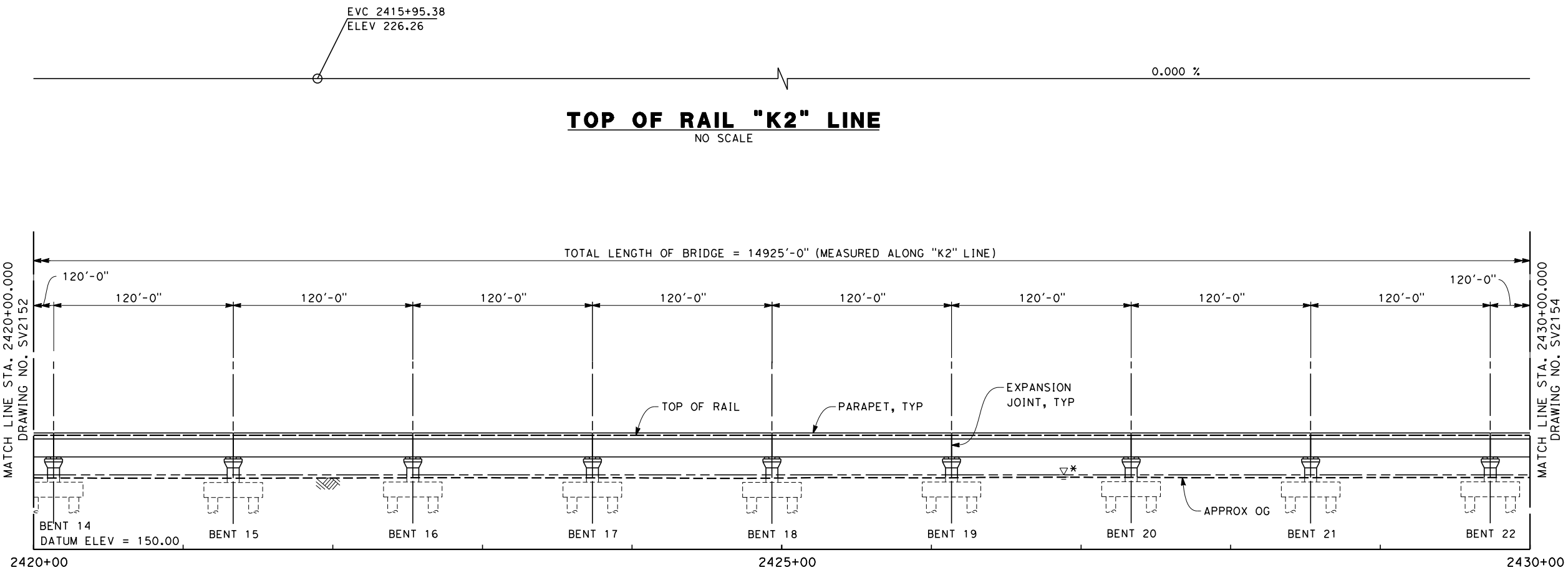


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

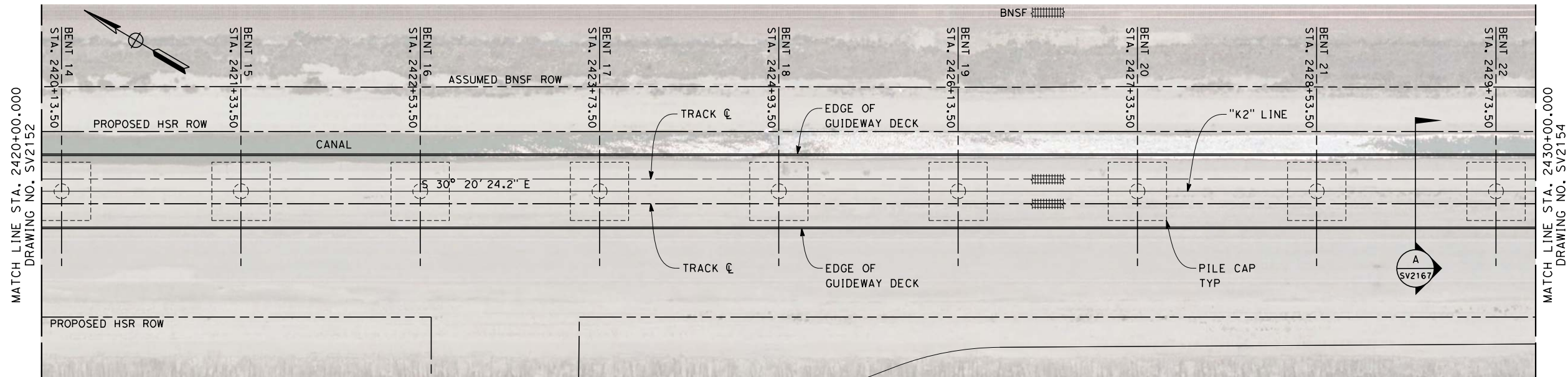
KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2152
SCALE AS SHOWN
SHEET NO. 3 OF 18

Nadine.Hutton 12/12/2013 10:22:50 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103430\X-FB-SV-2153-K2.dgn



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
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CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

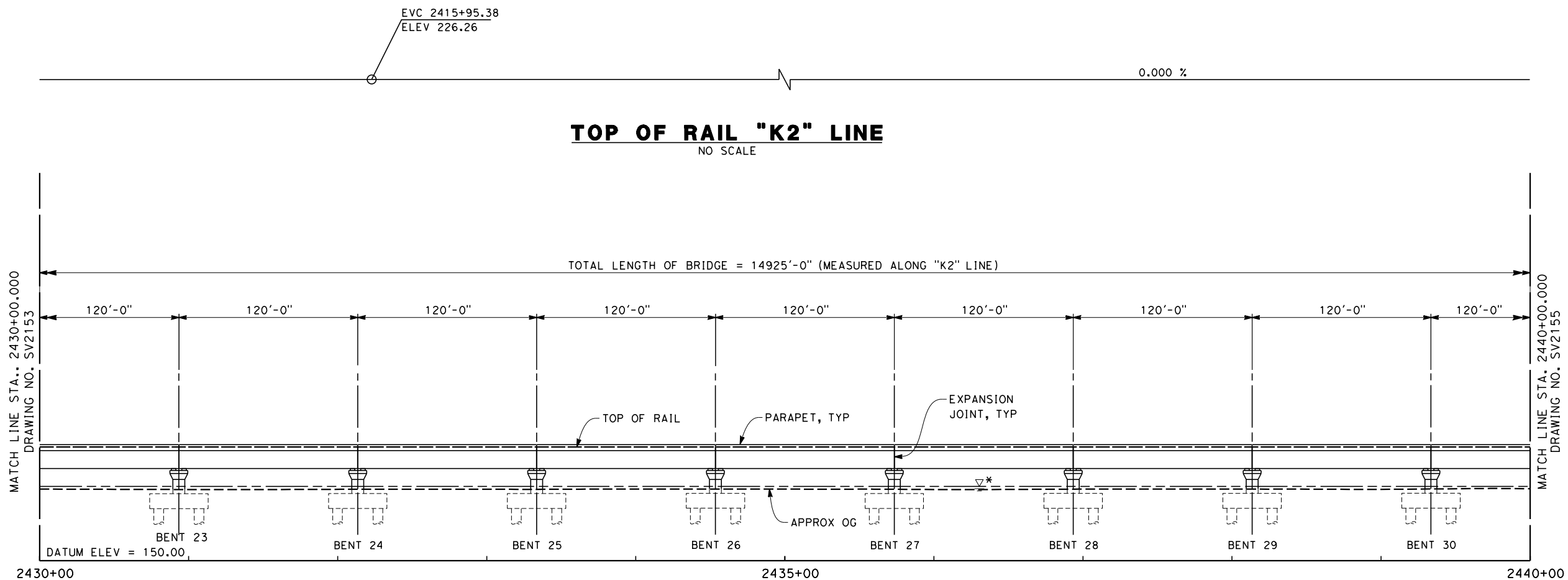


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

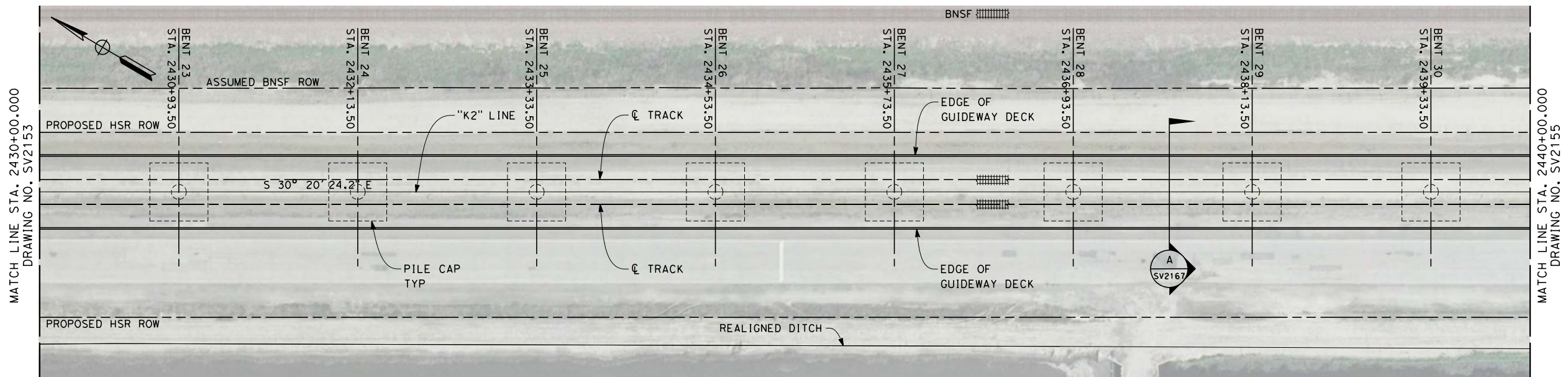
KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2153
SCALE AS SHOWN
SHEET NO. 4 OF 18

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

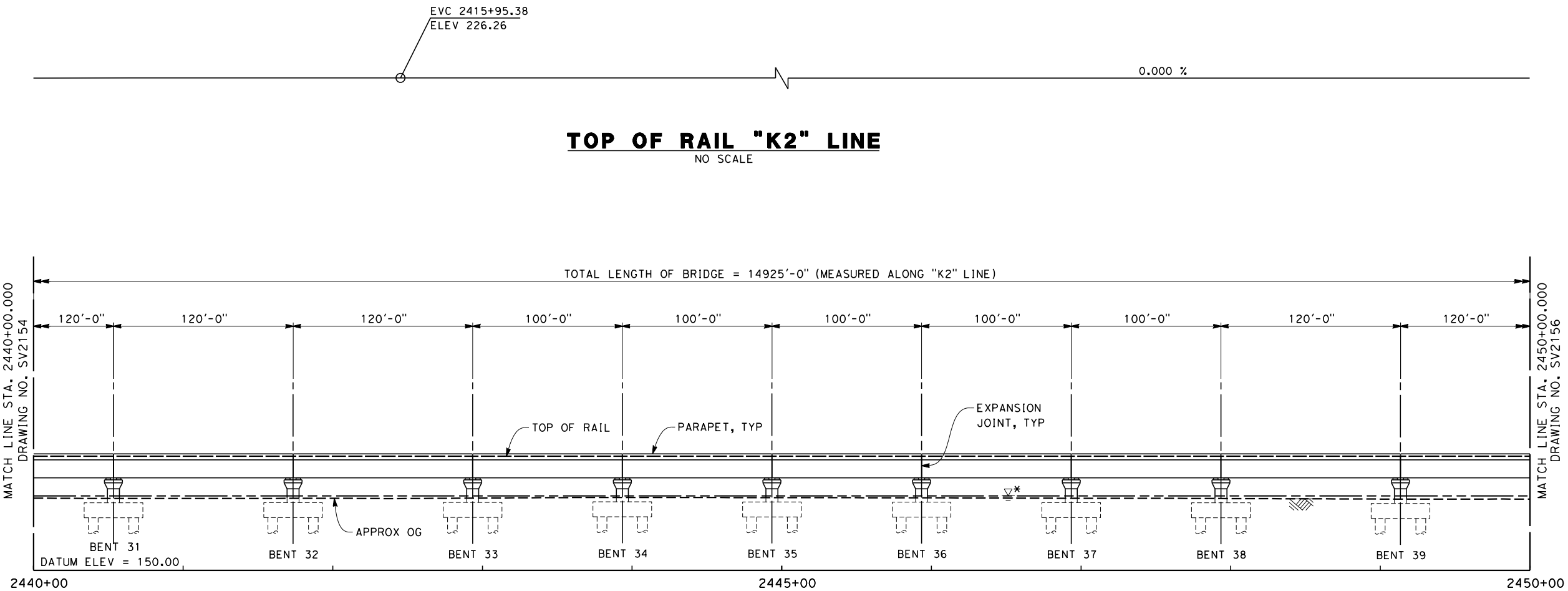
DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION

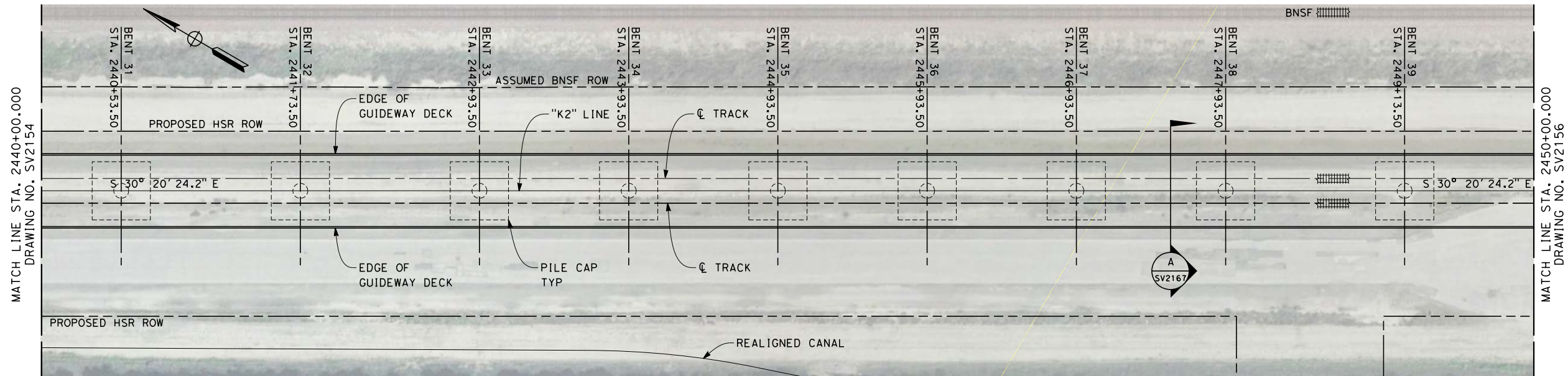


CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD KAWEAH SUBSECTION ALIGNMENT K2 CROSS CREEK VIADUCT PLAN AND ELEVATION	CONTRACT NO. HSR 06-0003
	DRAWING NO. SV2154
	SCALE AS SHOWN
	SHEET NO. 5 OF 18

Nadine.Hutton 12/12/2013 10:23:24 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103430\X-FB-SV-2155-K2.dgn



ELEVATION
SCALE 1" = 40'



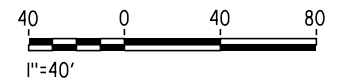
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

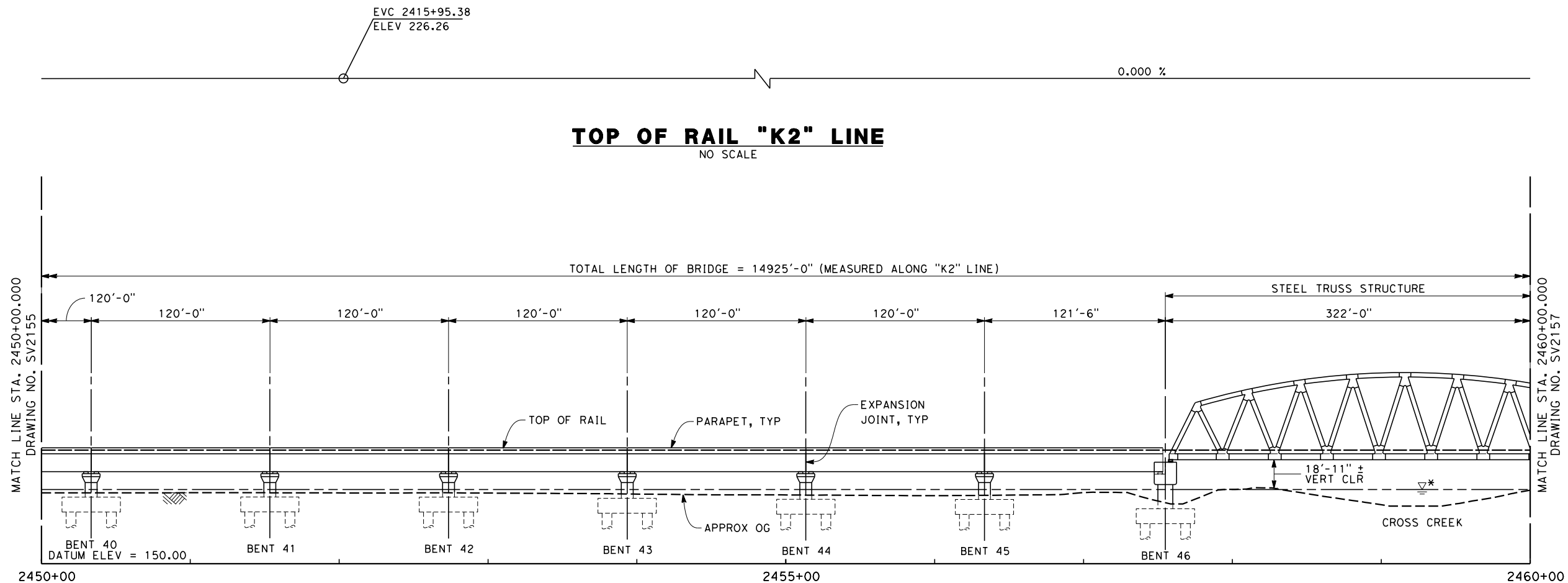


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

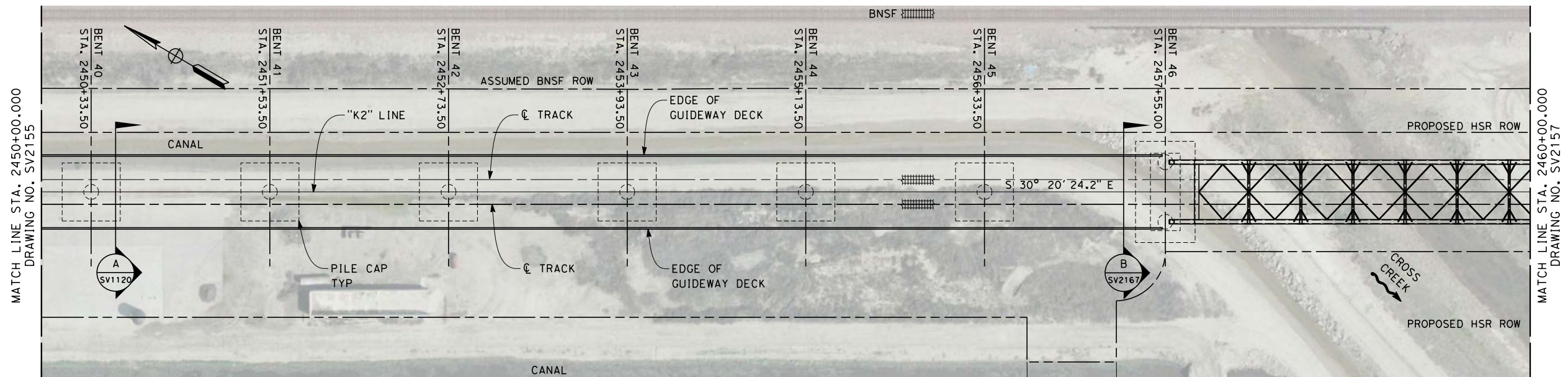
KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2155
SCALE AS SHOWN
SHEET NO. 6 OF 18

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ELEVATION
SCALE 1" = 40'



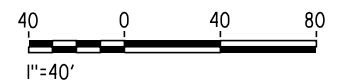
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

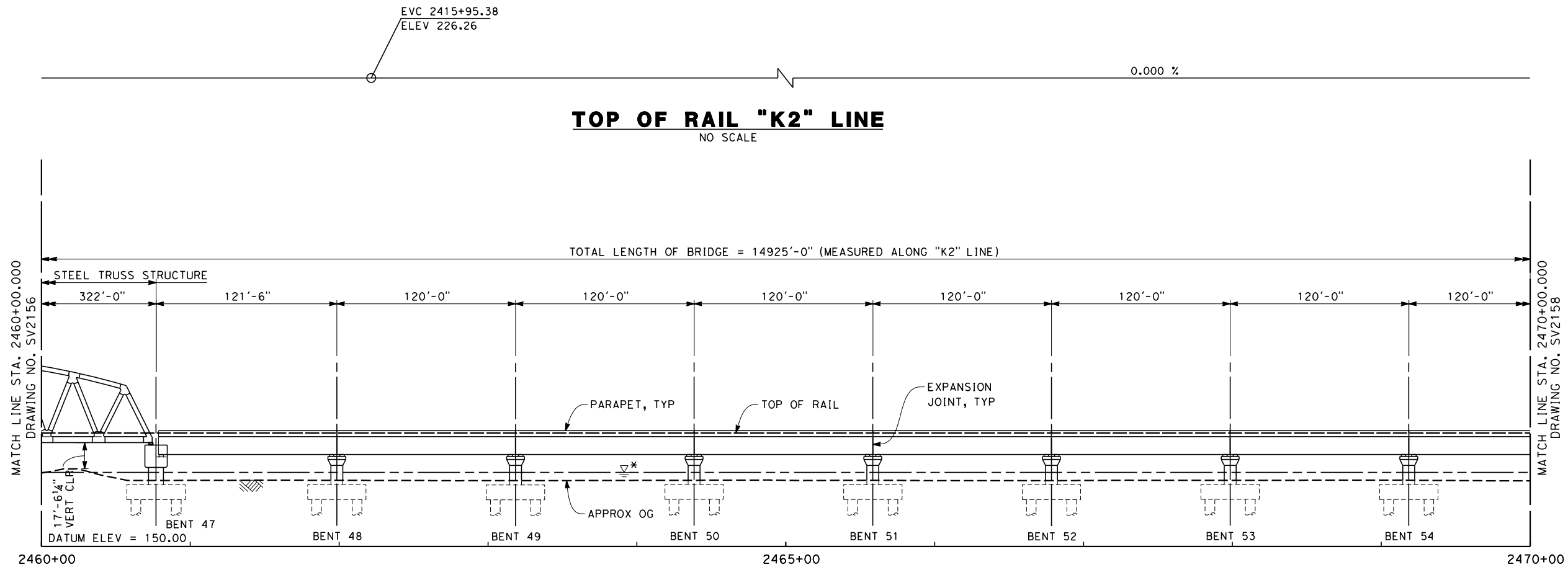


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

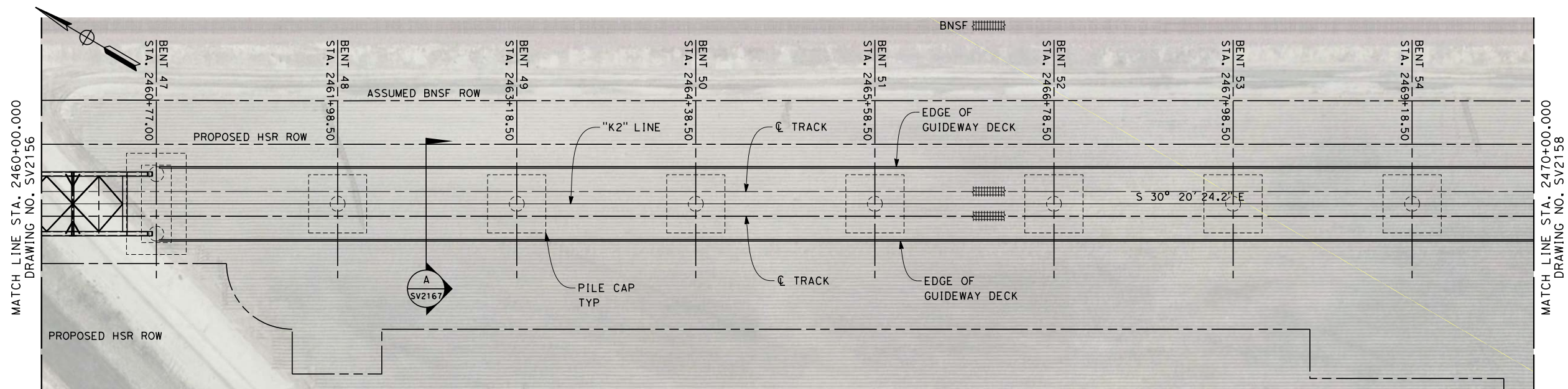
KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2156
SCALE AS SHOWN
SHEET NO. 7 OF 18

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ELEVATION
SCALE 1" = 40'



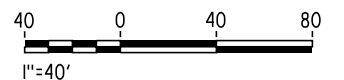
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

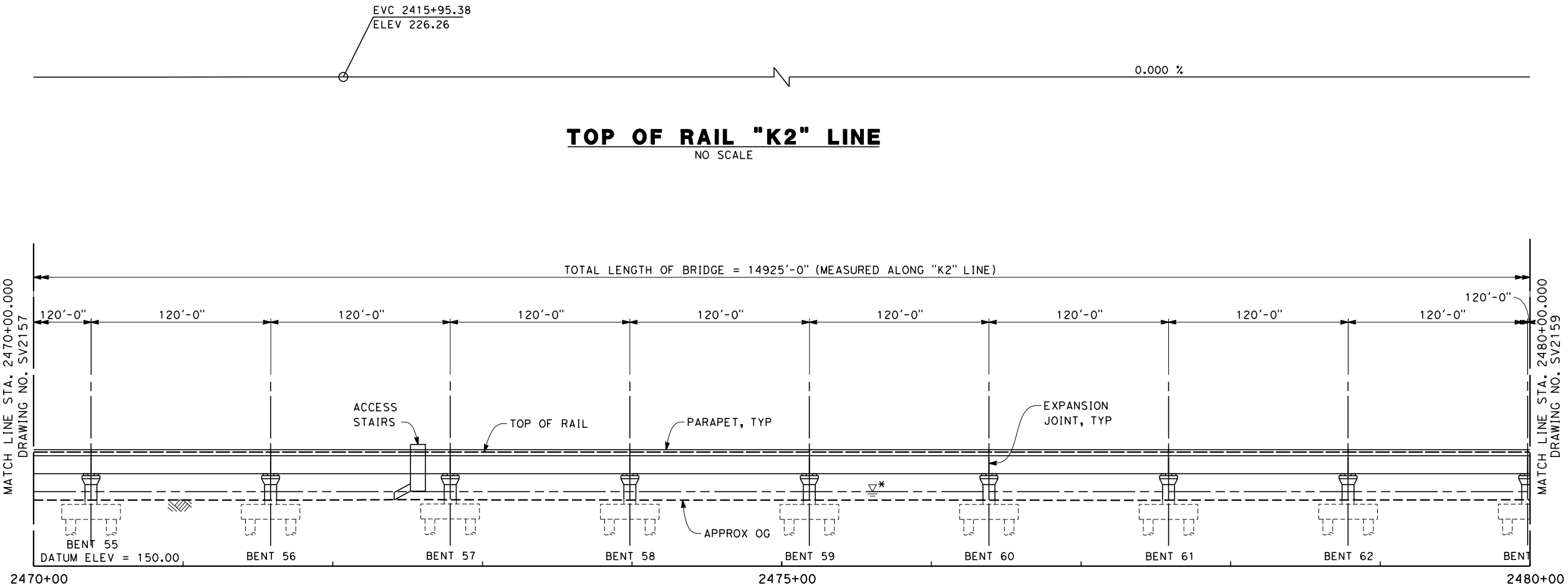


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

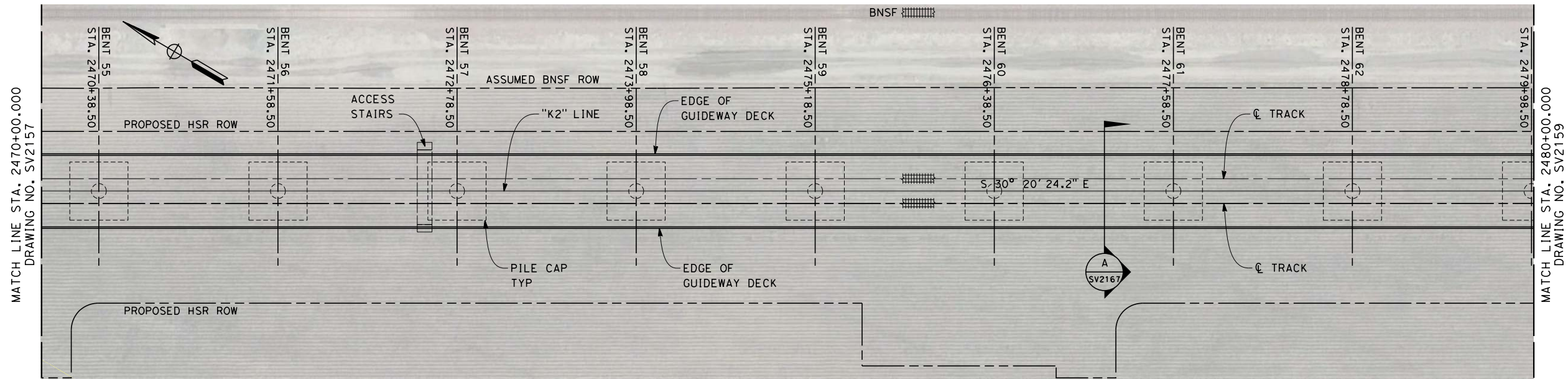
KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2157
SCALE AS SHOWN
SHEET NO. 8 OF 18

Nadine.Hutton 12/12/2013 10:24:23 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103430\X-FB-SV-2158-K2.dgn



ELEVATION
SCALE 1" = 40'



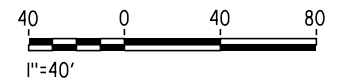
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

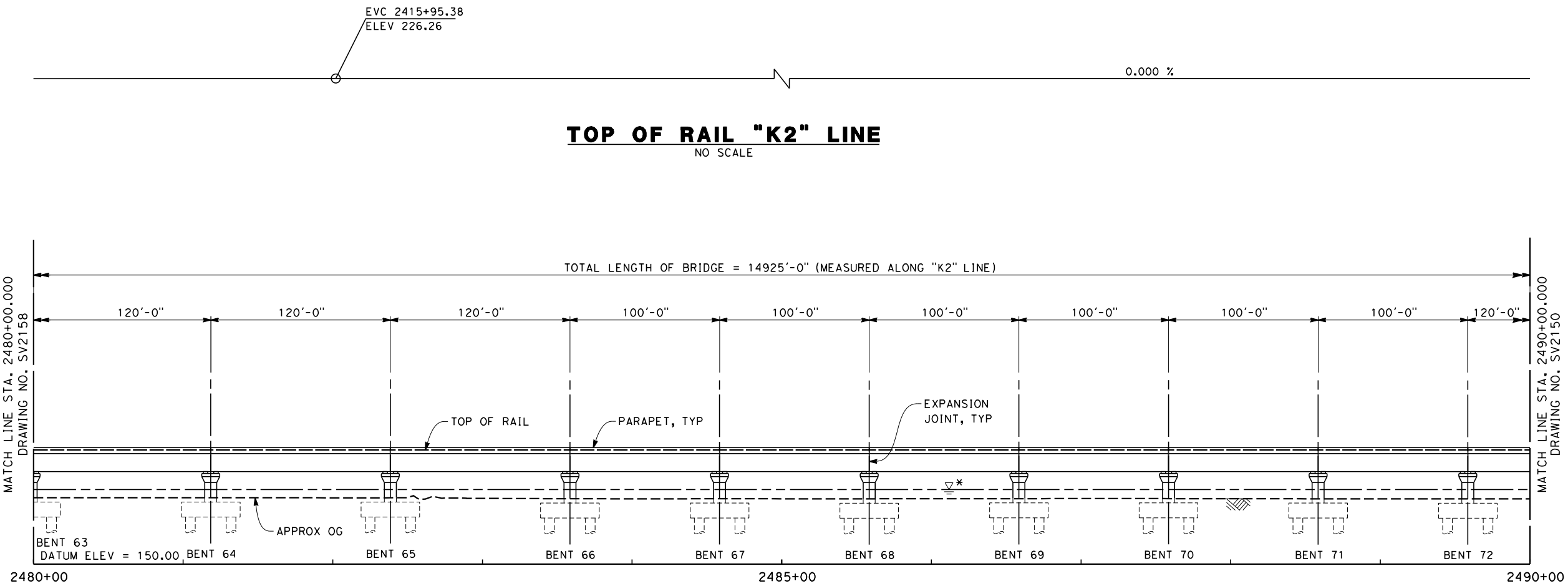


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

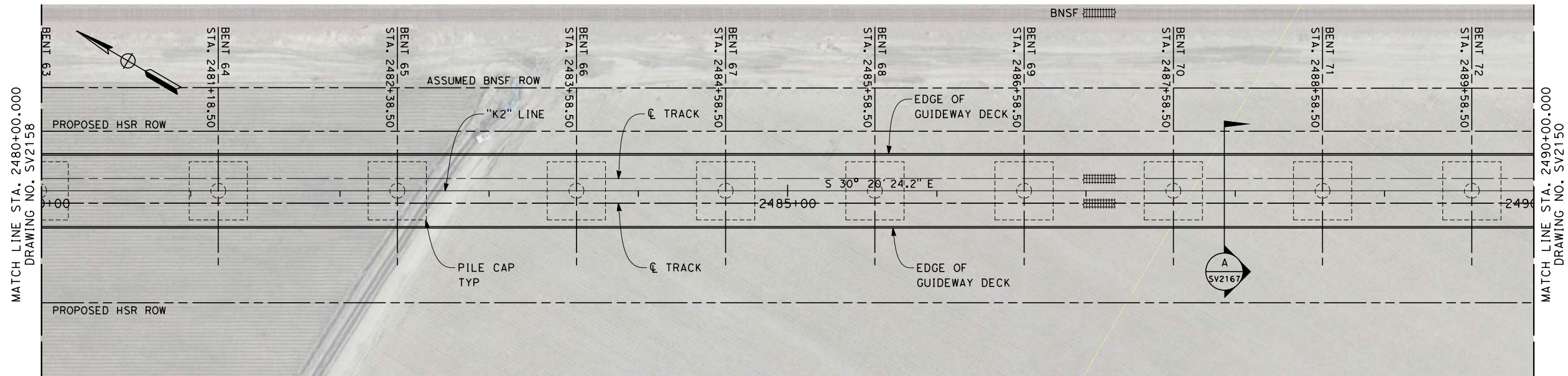
KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2158
SCALE AS SHOWN
SHEET NO. 9 OF 18

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

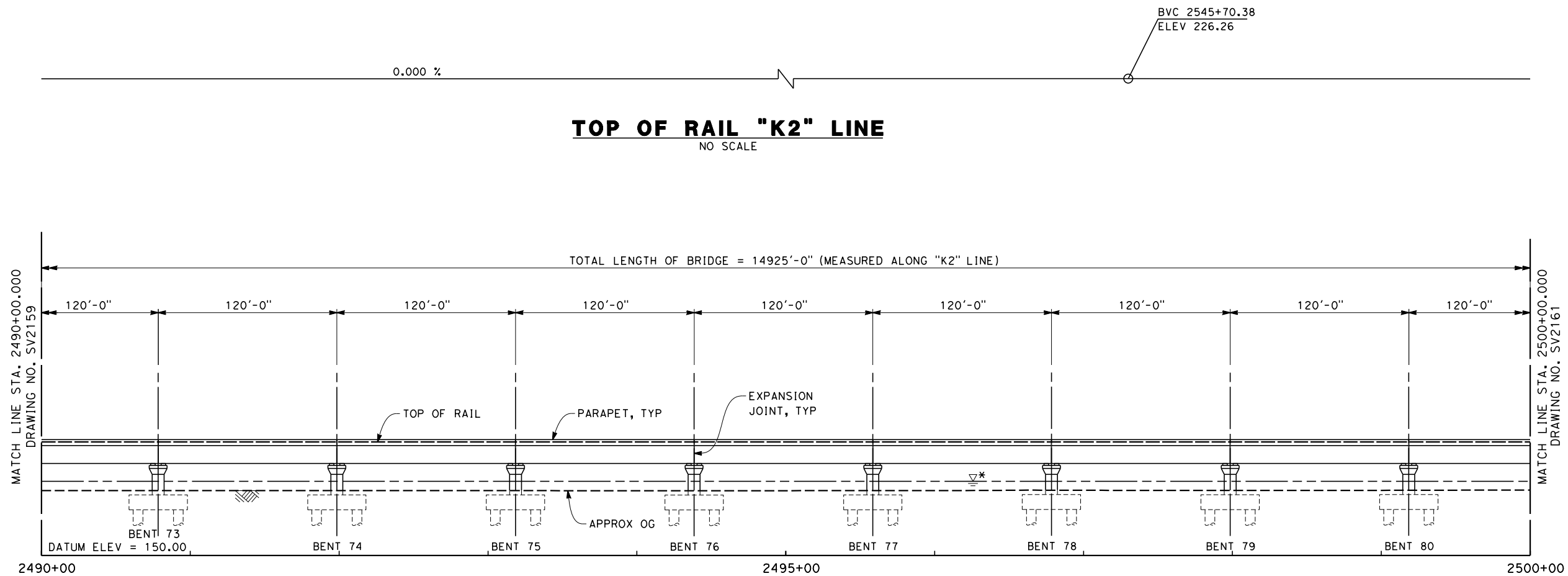
DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION

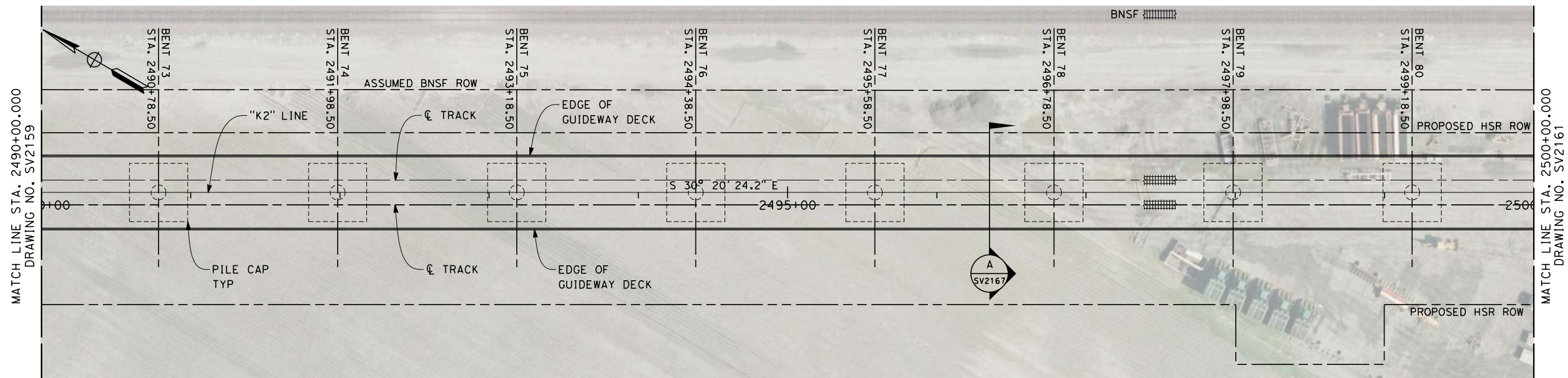


CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K2 CROSS CREEK VIADUCT PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2159
SCALE AS SHOWN
SHEET NO. 10 OF 18



SCALE 1" = 40'



SCALE 1" = 40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

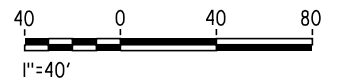
CONTRACT NO.	HSR 06-0003
DRAWING NO.	SV2160
SCALE	AS SHOWN
SHEET NO.	11 OF 18

NOTES

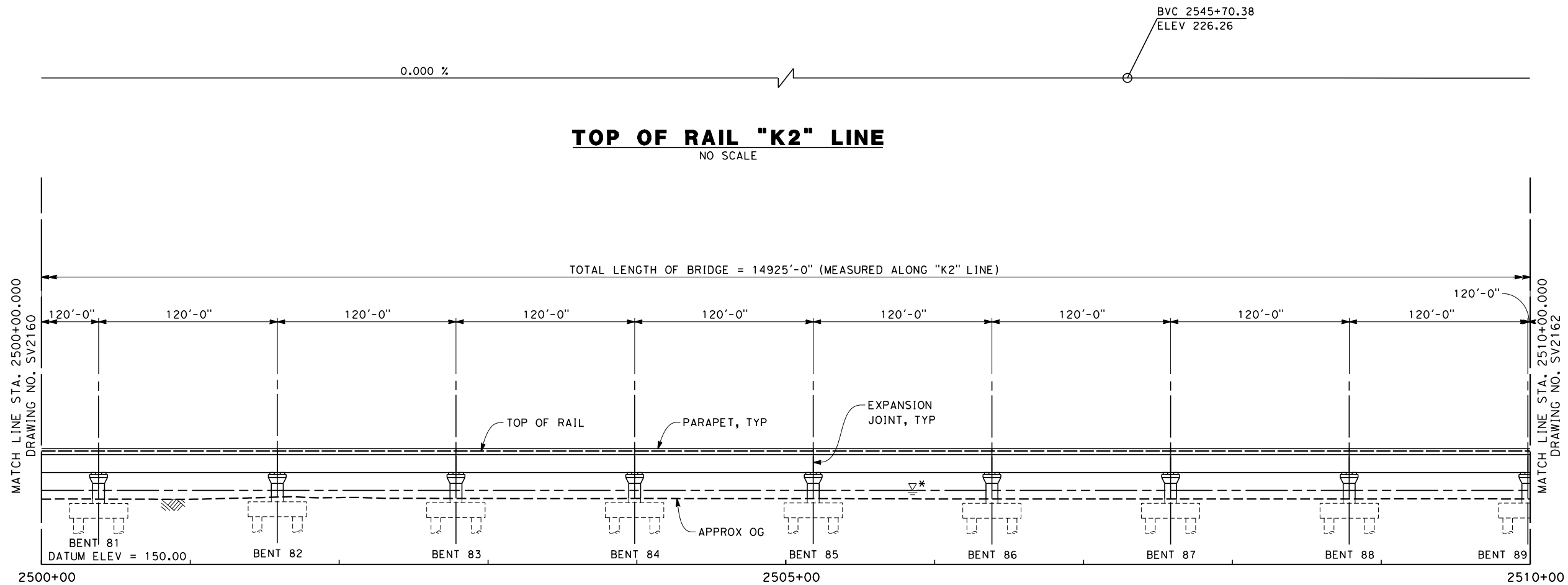
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST
IN-SITU
STEEL TRUSS - INSITU, SLID
OR LAUNCHED
ELEVATED SLABS - PC BEAM AND
INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

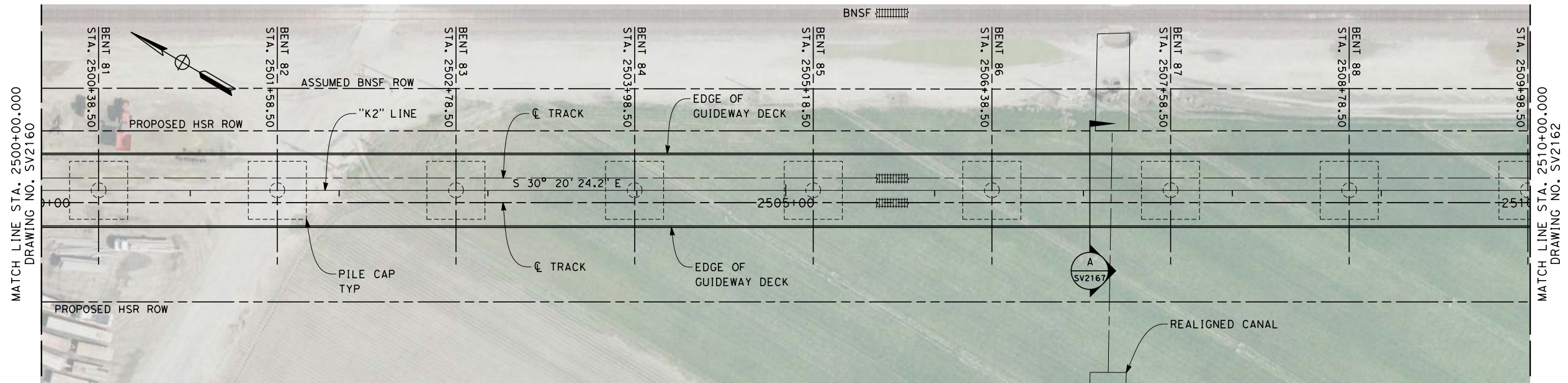
- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



Nadine.Hutton 12/12/2013 10:25:24 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103430\X-FB-SV-2161-K2.dgn



ELEVATION
SCALE 1" = 40'



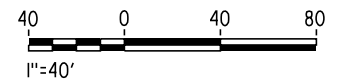
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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LEGEND:

- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

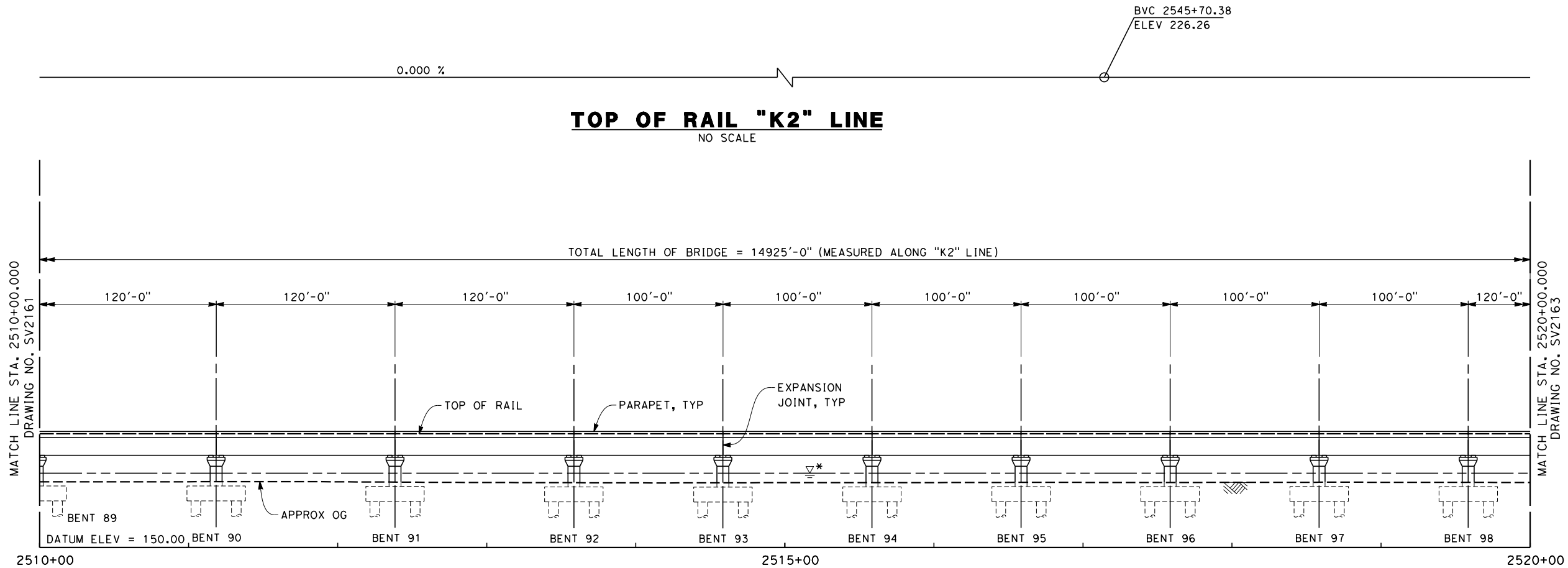


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

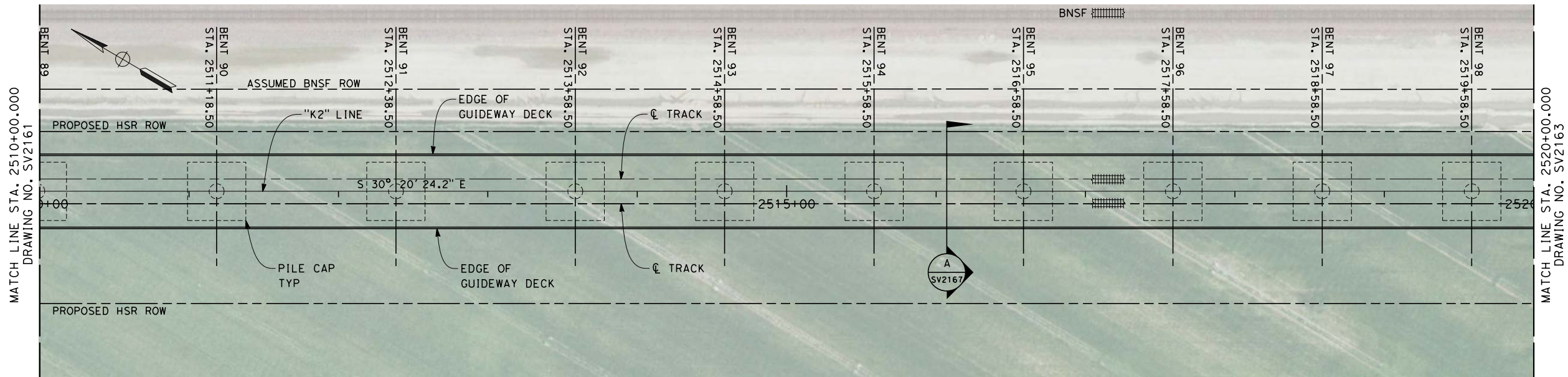
KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2161
SCALE AS SHOWN
SHEET NO. 12 OF 18

12/12/2013 10:25:44 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103430\X-FB-SV-2162-K2.dgn Nadine.Hutton



ELEVATION
SCALE 1" = 40'



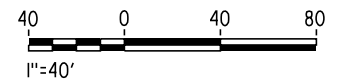
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
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LEGEND:

- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

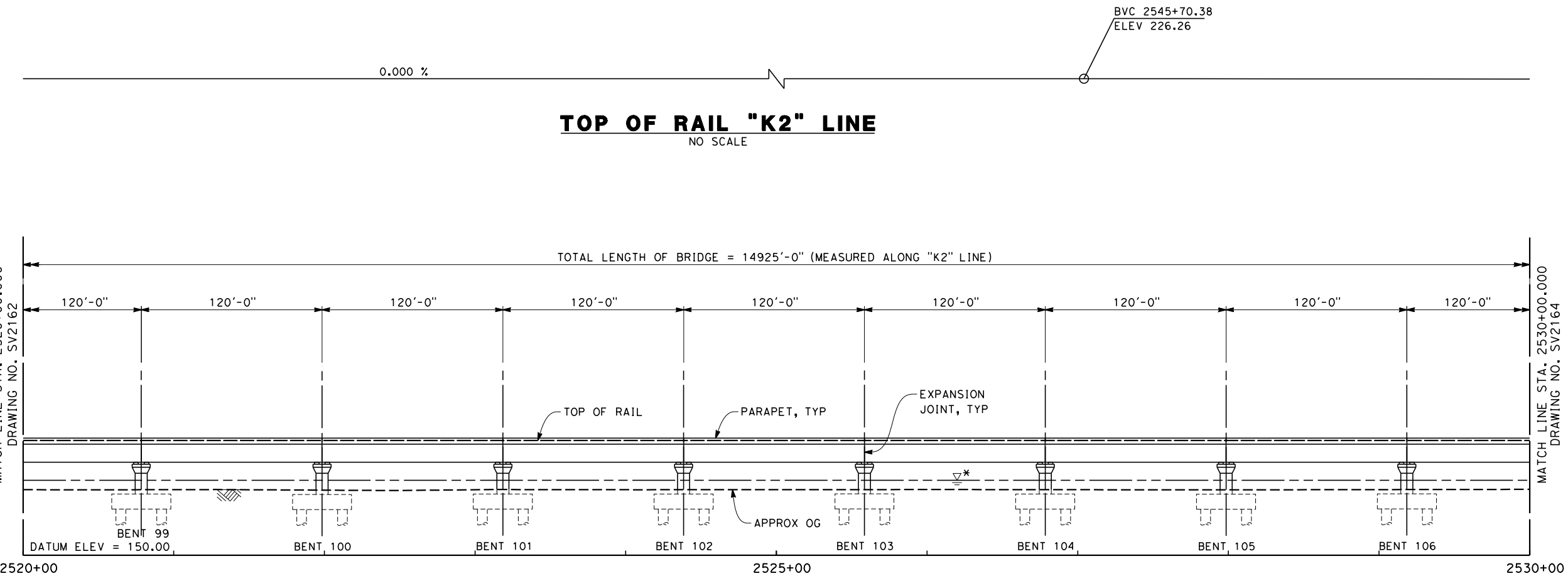


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

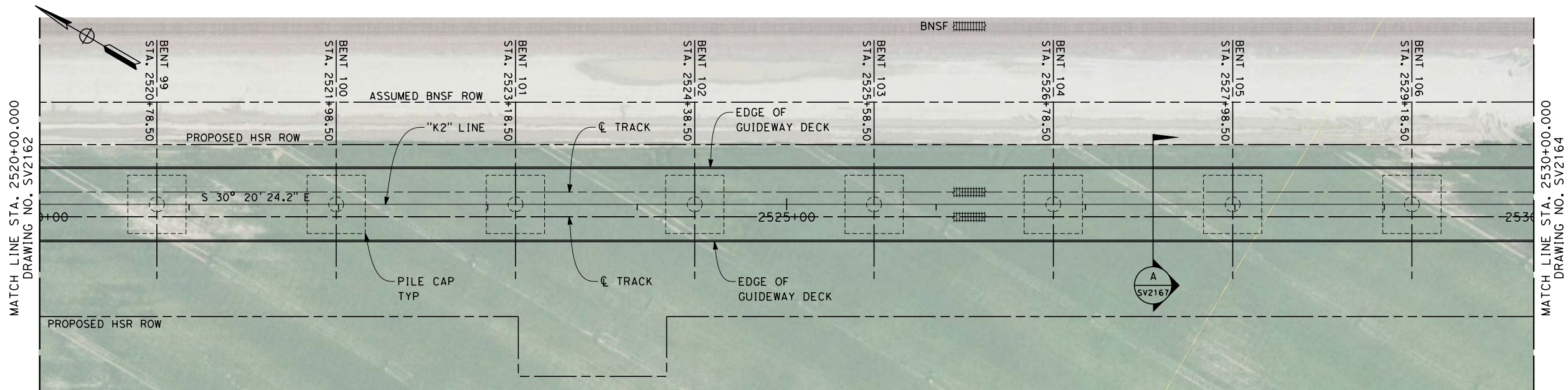
KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2162
SCALE AS SHOWN
SHEET NO. 13 OF 18

Nadine.Hutton 12/12/2013 10:25:59 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103430\X-FB-SV-2163-K2.dgn



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

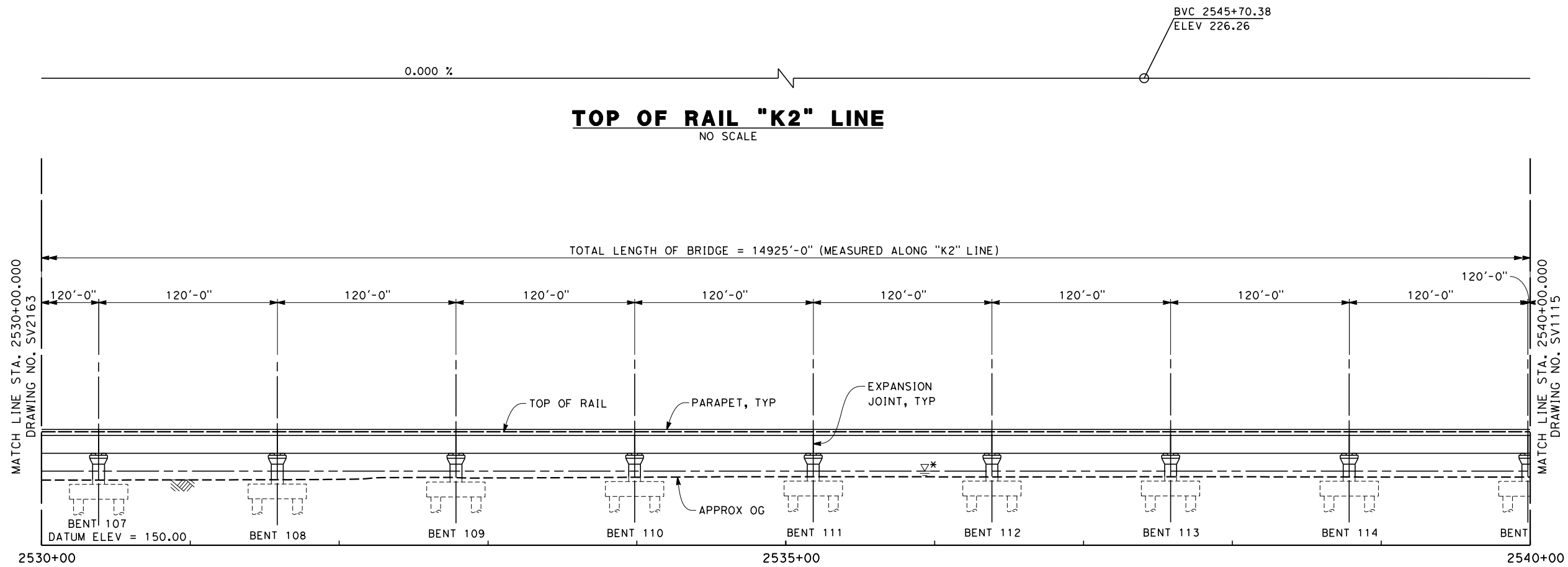
RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



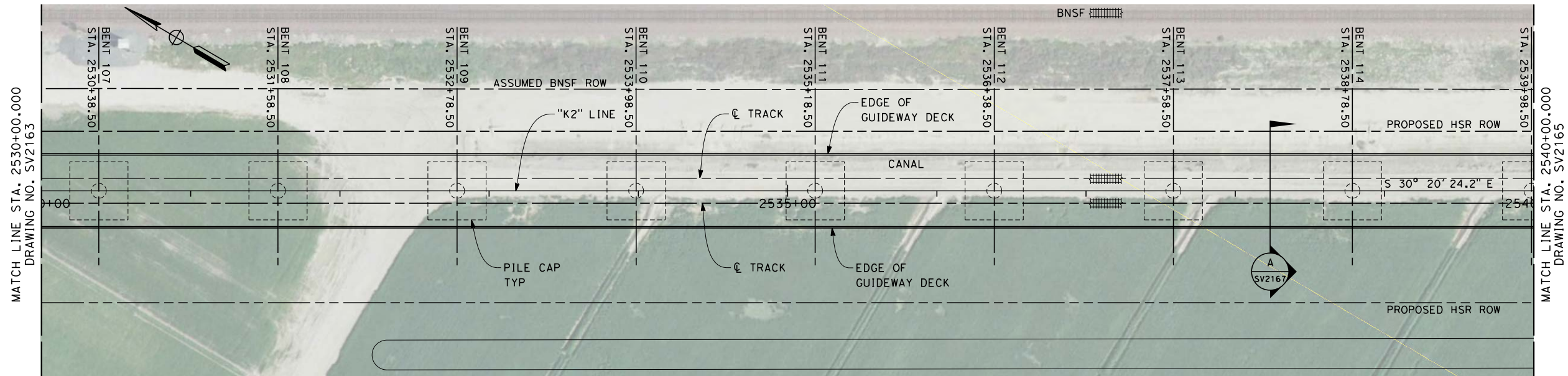
CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K2 CROSS CREEK VIADUCT PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2163
SCALE AS SHOWN
SHEET NO. 14 OF 18

Nadine.Hutton 12/12/2013 10:26:20 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103430\X-FB-SV-2164-K2.dgn



ELEVATION
SCALE 1" = 40'



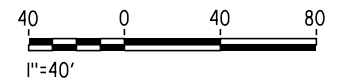
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

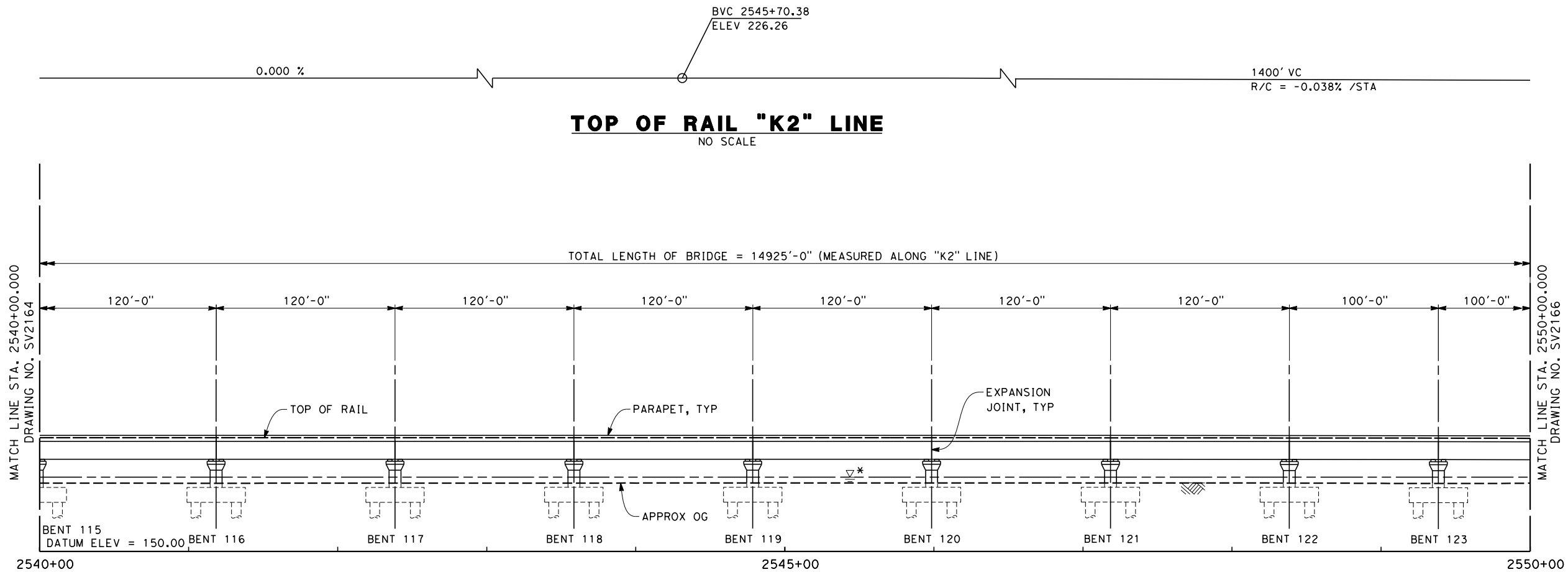


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

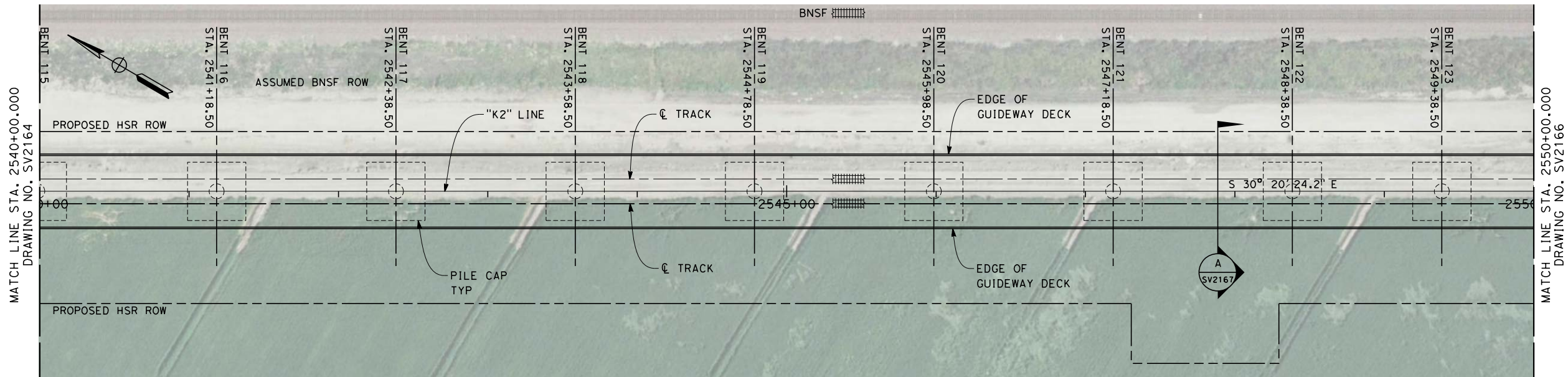
KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2164
SCALE AS SHOWN
SHEET NO. 15 OF 18

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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LEGEND:

- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

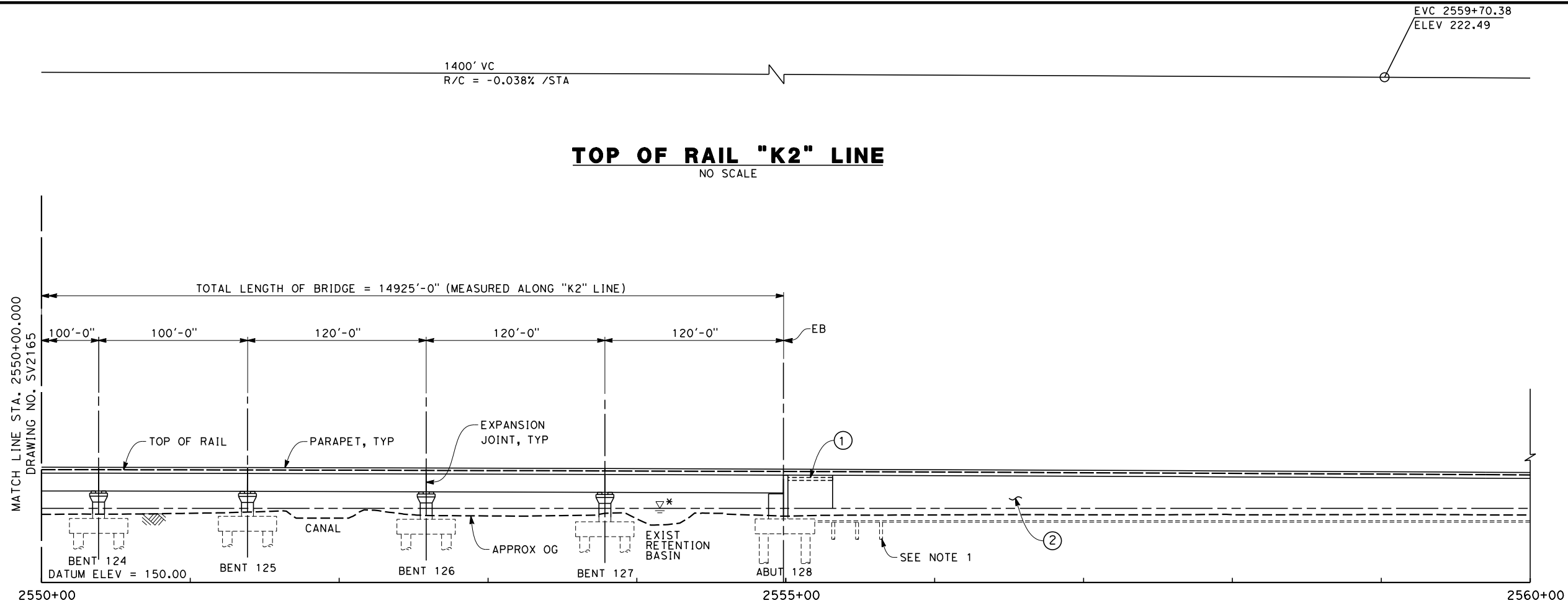


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

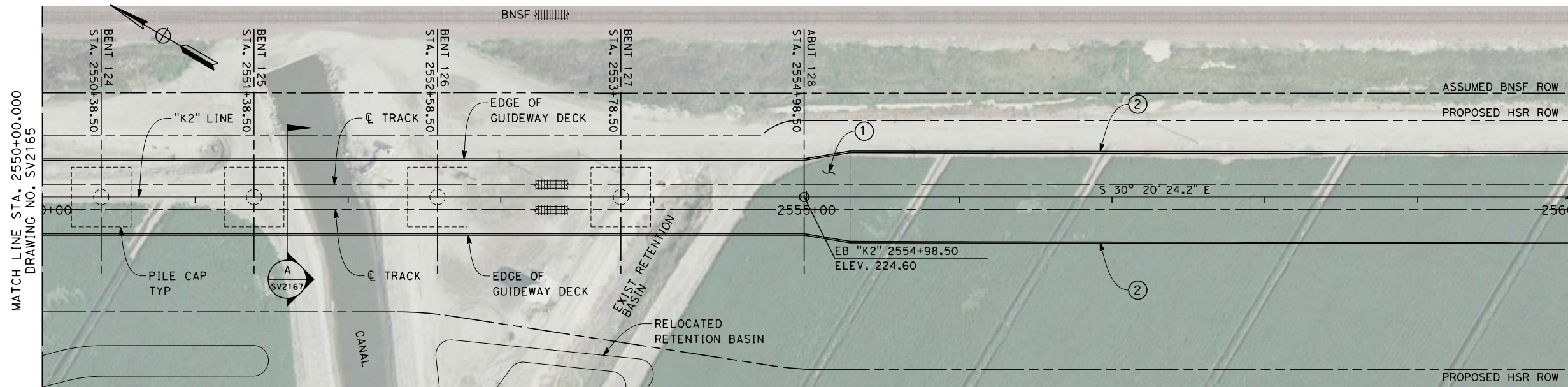
KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2165
SCALE AS SHOWN
SHEET NO. 16 OF 18

Nadine.Hutton 12/12/2013 10:27:03 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0103430\X-FB-SV-2166-K2.dgn



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

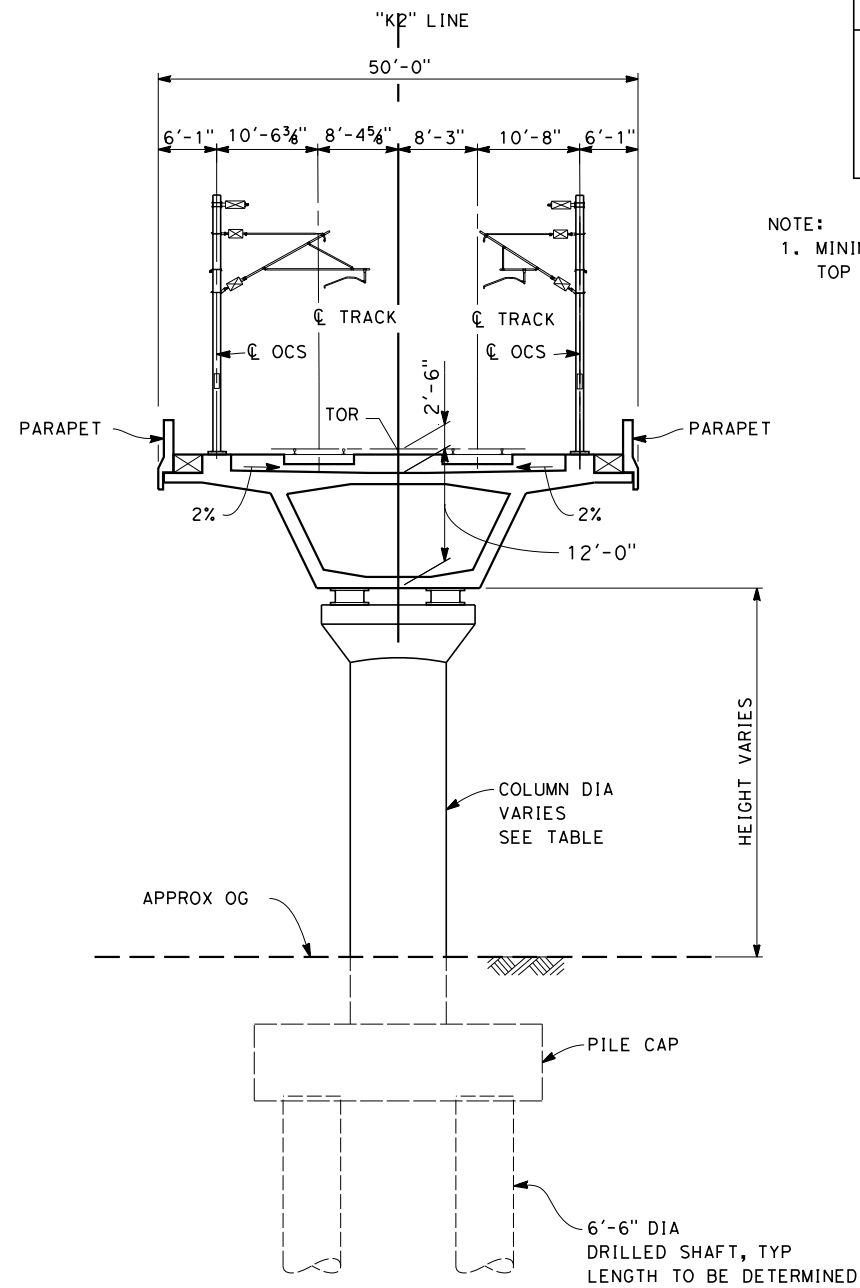


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2166
SCALE AS SHOWN
SHEET NO. 17 OF 18

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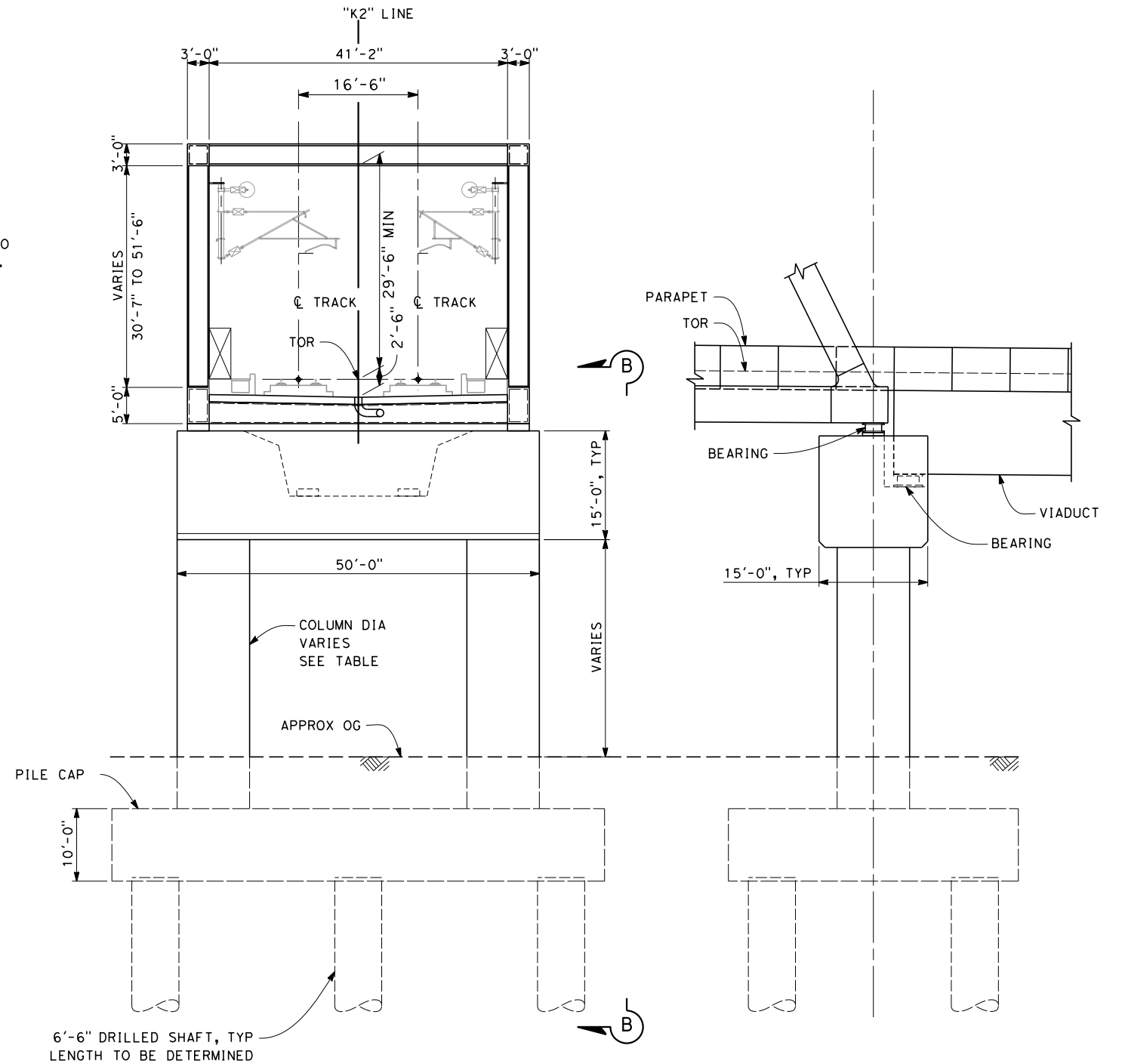
SECTION A

SCALE: 1" = 10'

STA 2405+74 THROUGH 2457+55
STA 2460+77 THROUGH 2554+99

COLUMN DIAMETERS	
COLUMN HEIGHT	DIAMETER
< 20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT

NOTE:
1. MINIMUM DIMENSION FROM SOFFIT TO TOP OF FOUNDATION SHALL BE 16'.



SECTION B

SCALE: 1" = 10'

STA 2457+55 THROUGH 2460+77

SECTION B-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
CROSS CREEK VIADUCT
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2167
SCALE AS SHOWN
SHEET NO. 18 OF 18

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
E. SUDHAUSEN
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

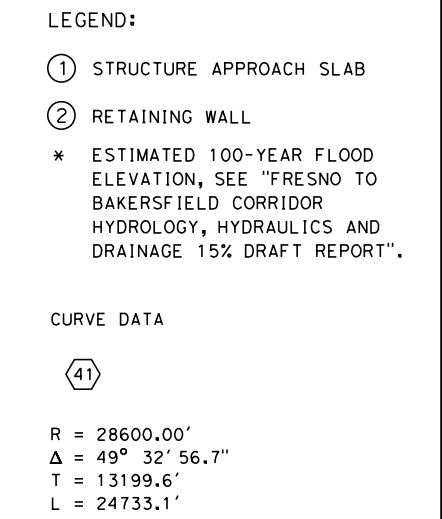
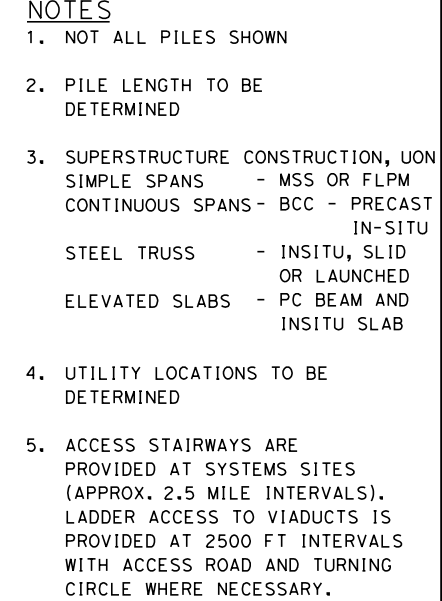
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**





**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
KEY MAP

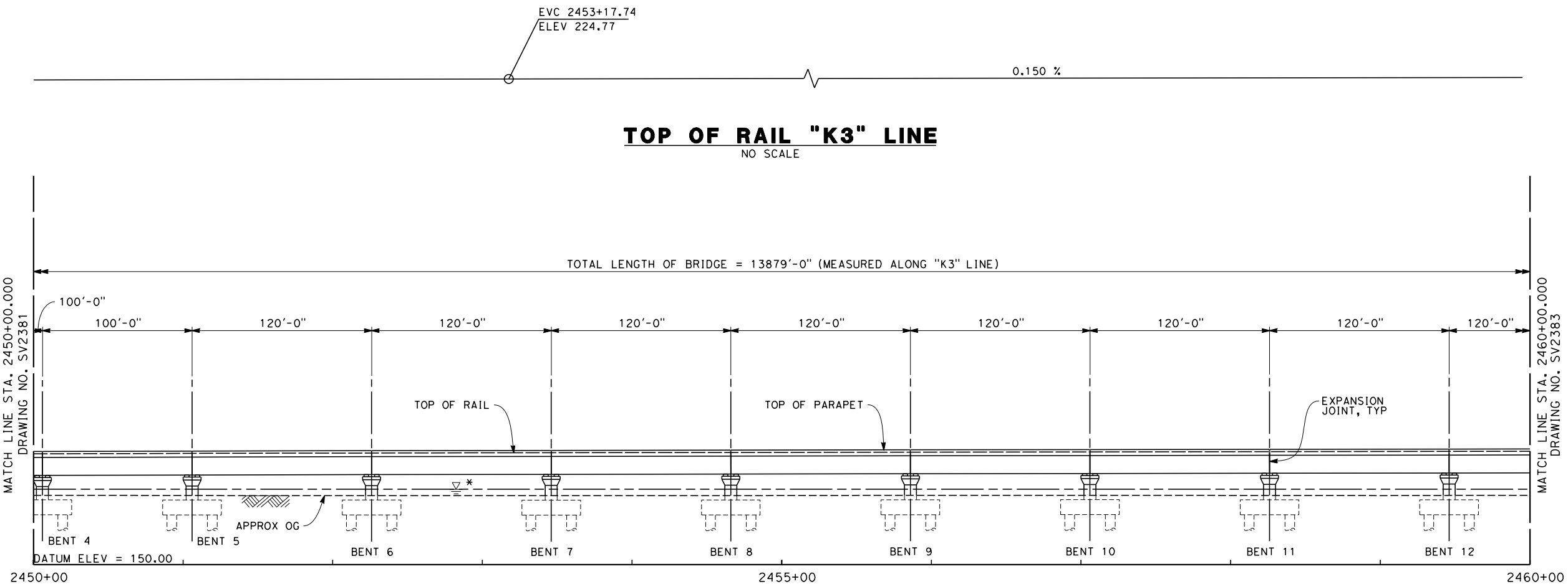
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2380
SCALE
AS SHOWN
SHEET NO.
1 OF 18



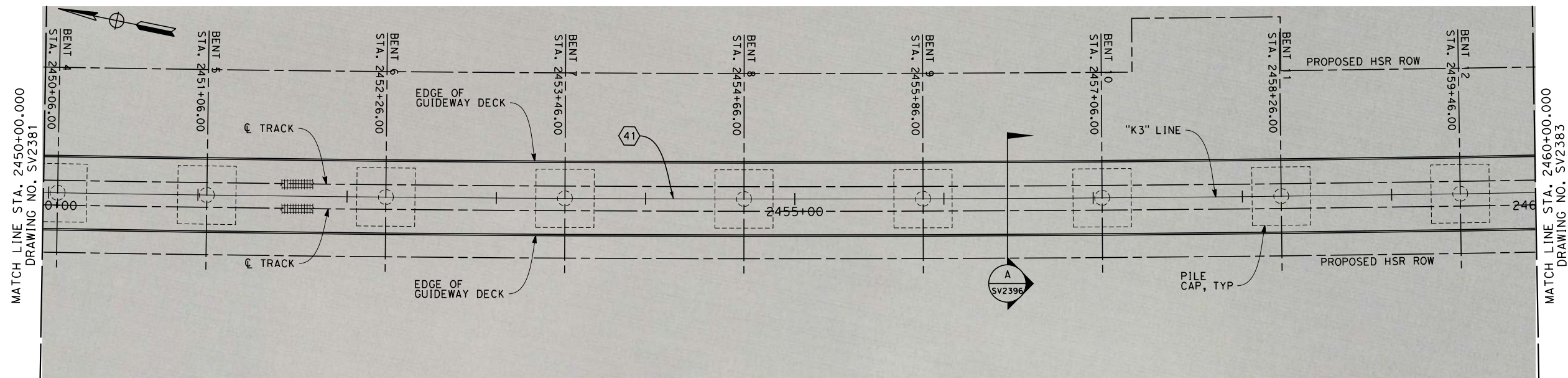
andrew.armstrong 2

						DESIGNED BY M. FISHER	RECORD SET 15% DESIGN SUBMISSION NOT FOR CONSTRUCTION			CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD KAWEAH SUBSECTION ALIGNMENT K3 CROSS CREEK VIADUCT PLAN AND ELEVATION	CONTRACT NO. HSR 06-0003
						DRAWN BY F. PALERMO					DRAWING NO. SV2381
						CHECKED BY A. ARMSTRONG					SCALE AS SHOWN
						IN CHARGE R. COFFIN					SHEET NO. 2 OF 18
						DATE 12/31/13					
REV	DATE	BY	CHK	APP	DESCRIPTION						

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

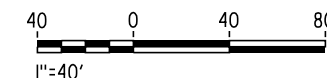
- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

④1

R = 28600.00'
Δ = 49° 32' 56.7"
T = 13199.6'
L = 24733.1'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

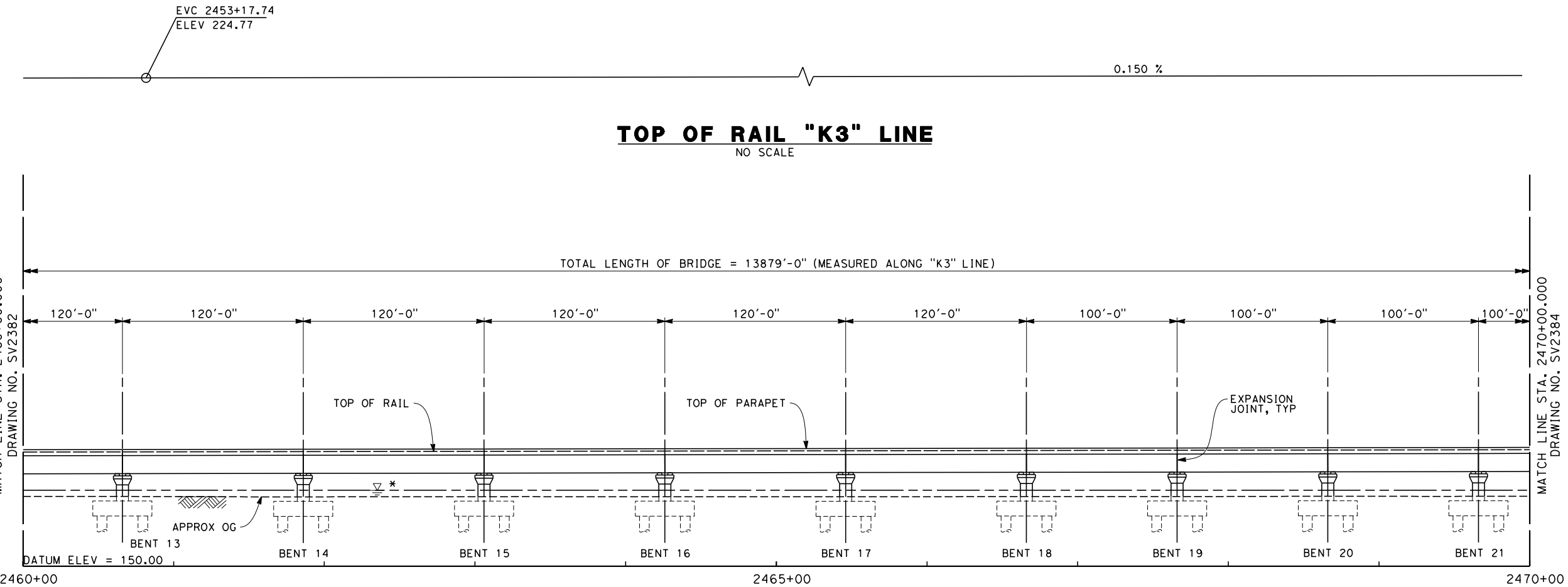
RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



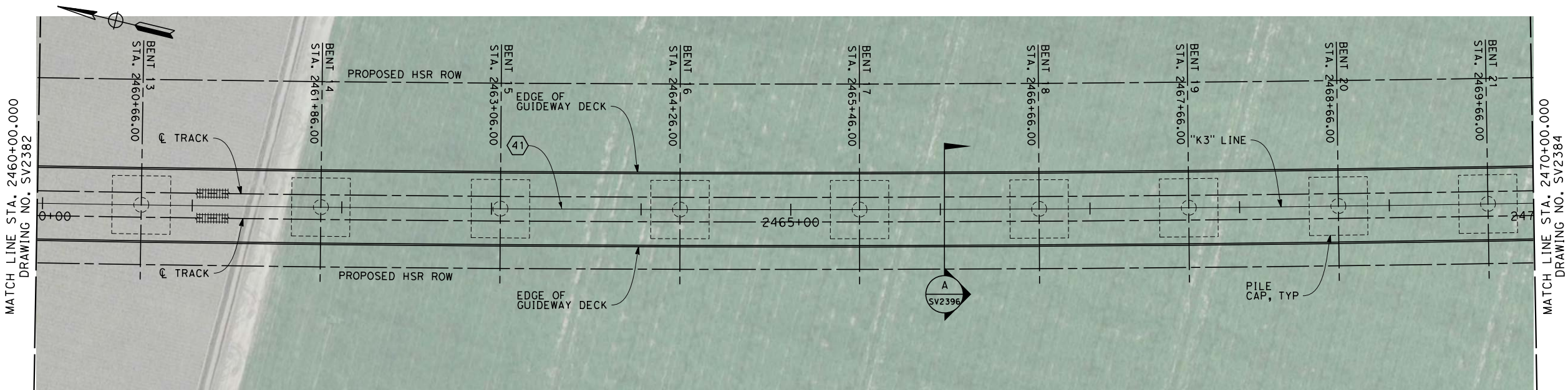
CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K3 CROSS CREEK VIADUCT PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2382
SCALE AS SHOWN
SHEET NO. 3 OF 18

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

41

R = 28600.00'
Δ = 49° 32' 56.7"
T = 13199.6'
L = 24733.1'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

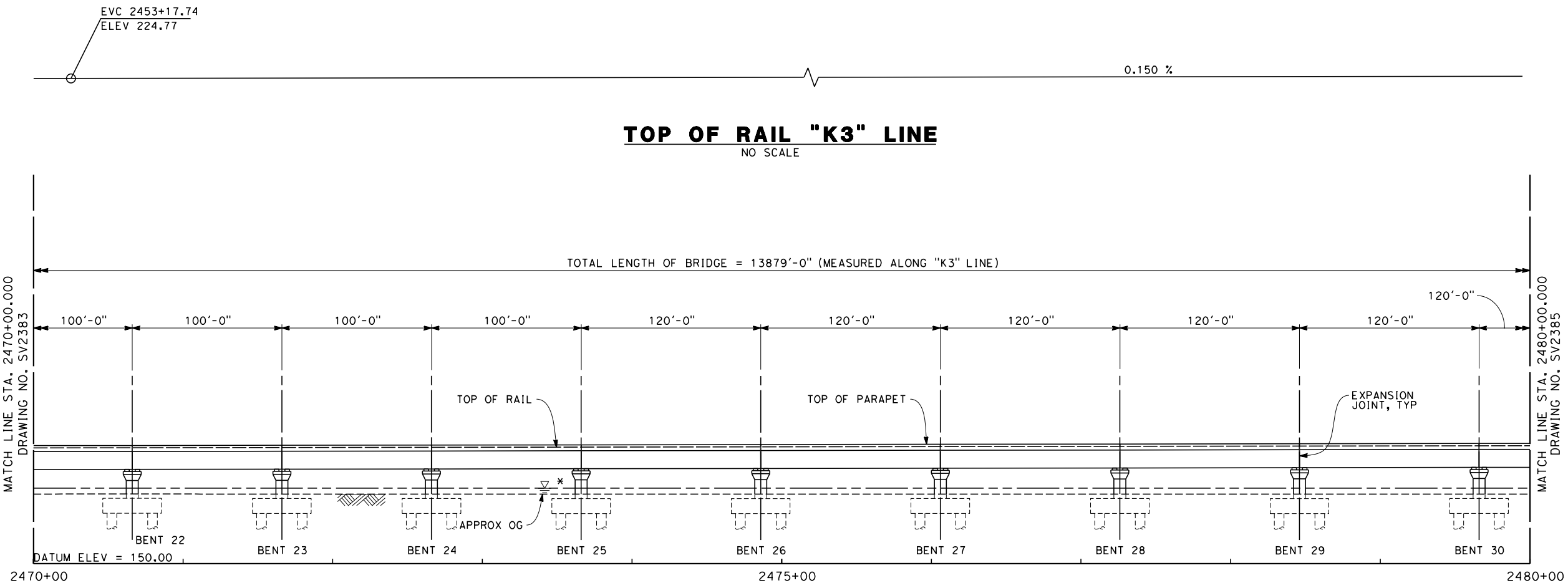


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

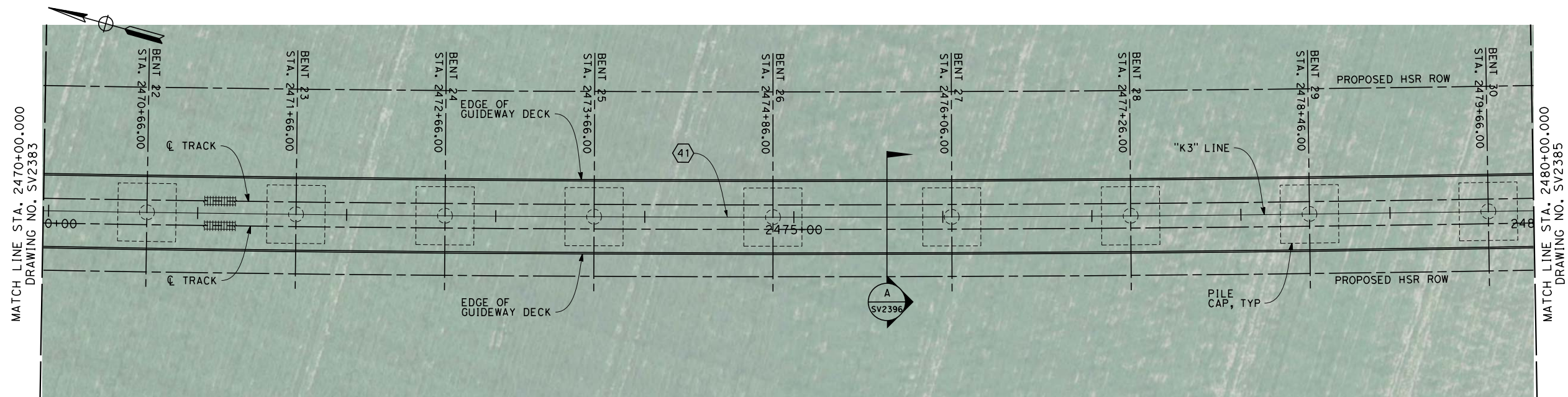
KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2383
SCALE AS SHOWN
SHEET NO. 4 OF 18

c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125235\FB-SV-2384-K3.dgn 12/12/2013 1:50:48 PM andrew.armstrong



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

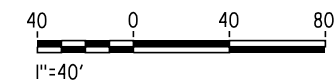
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

④1

R = 28600.00'
Δ = 49° 32' 56.7"
T = 13199.6'
L = 24733.1'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

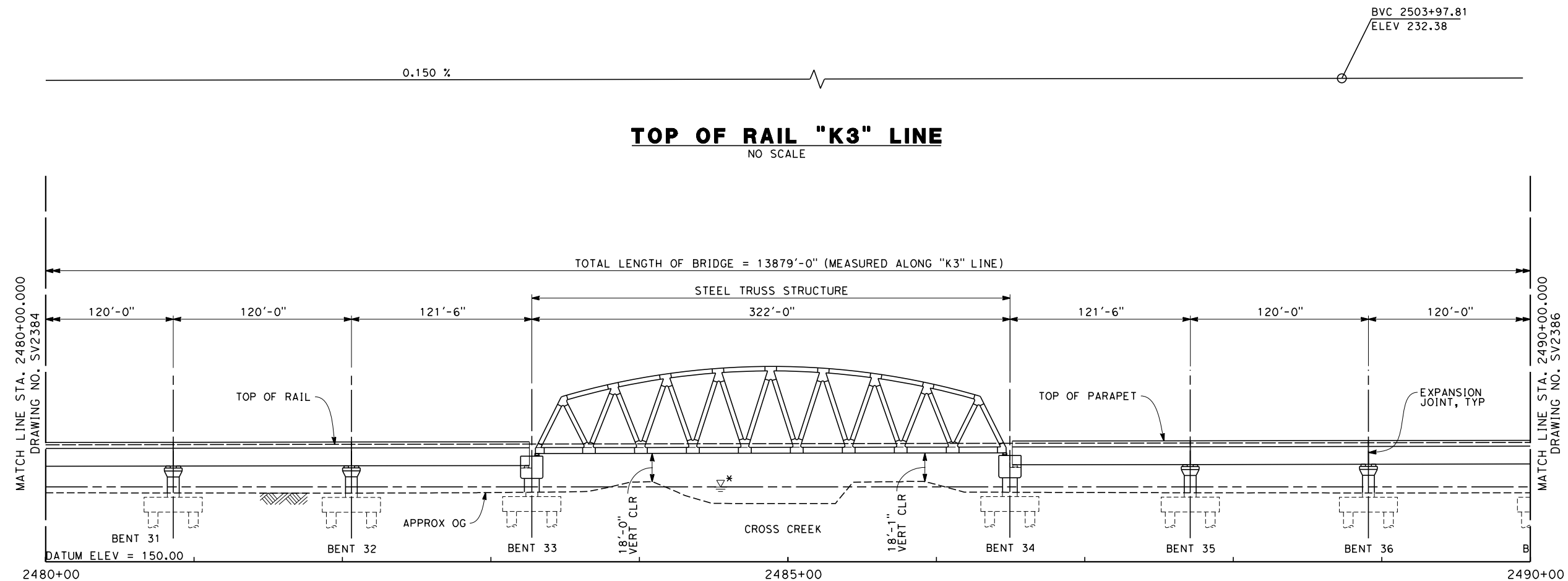


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

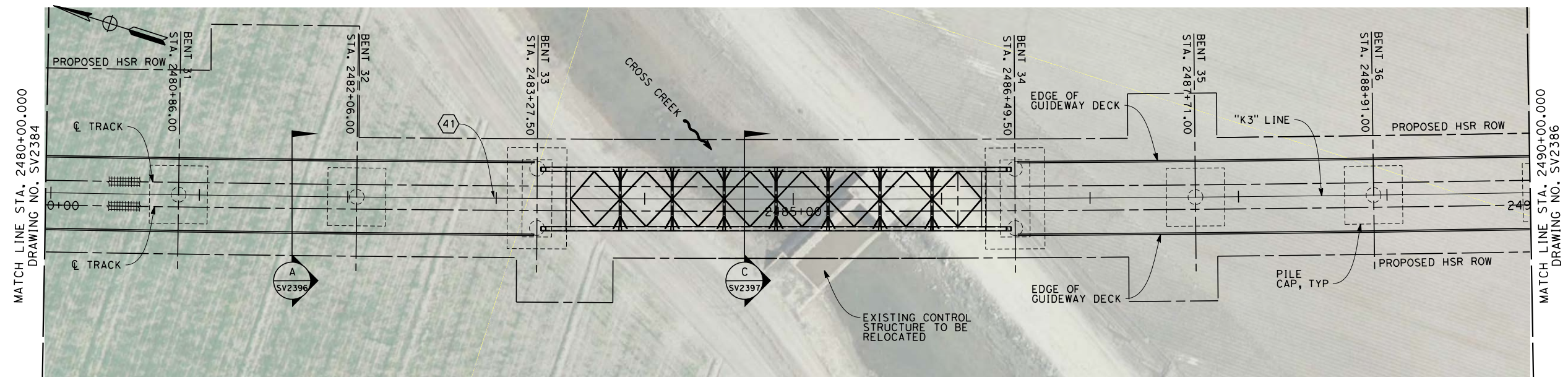
KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2384
SCALE AS SHOWN
SHEET NO. 5 OF 18

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
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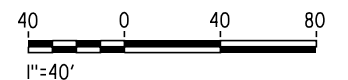
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

41

R = 28600.00'
Δ = 49° 32' 56.7"
T = 13199.6'
L = 24733.1'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

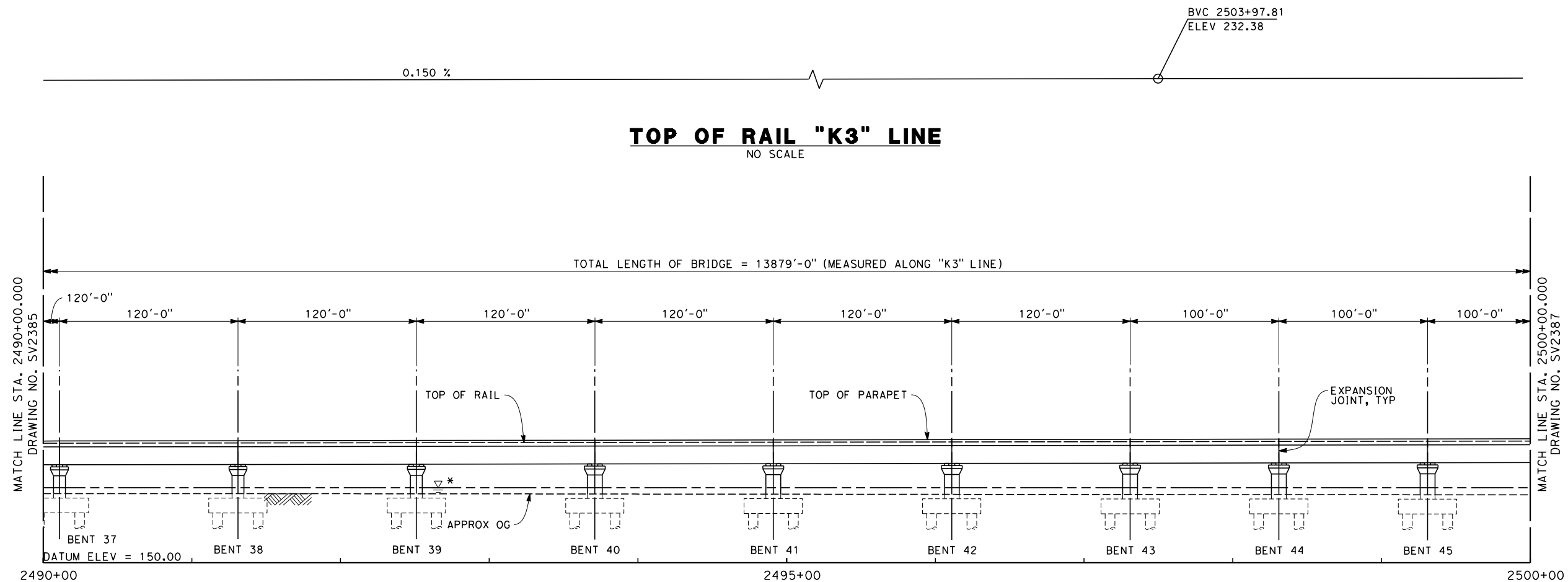


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

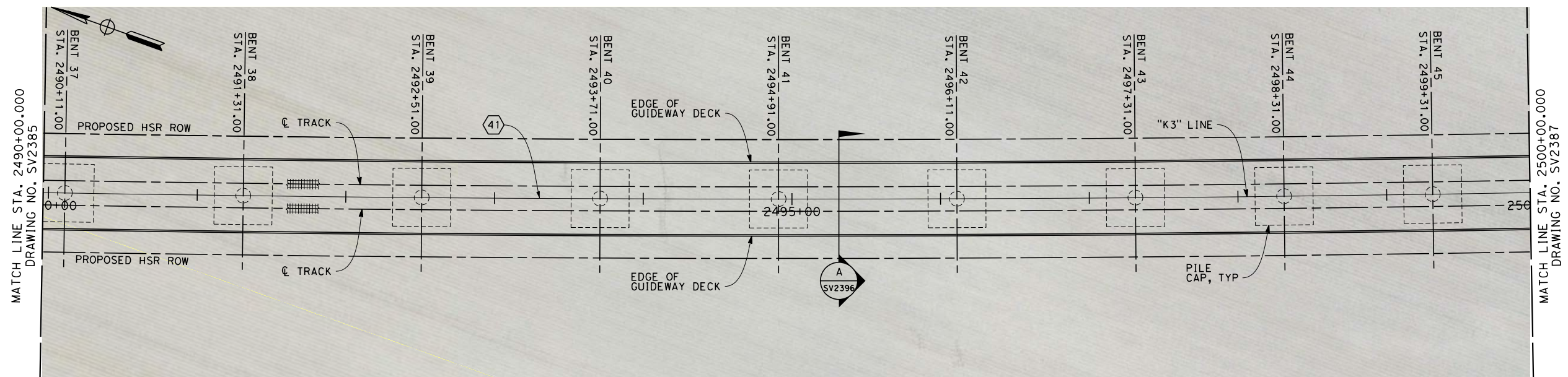
KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2385
SCALE AS SHOWN
SHEET NO. 6 OF 18

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
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IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

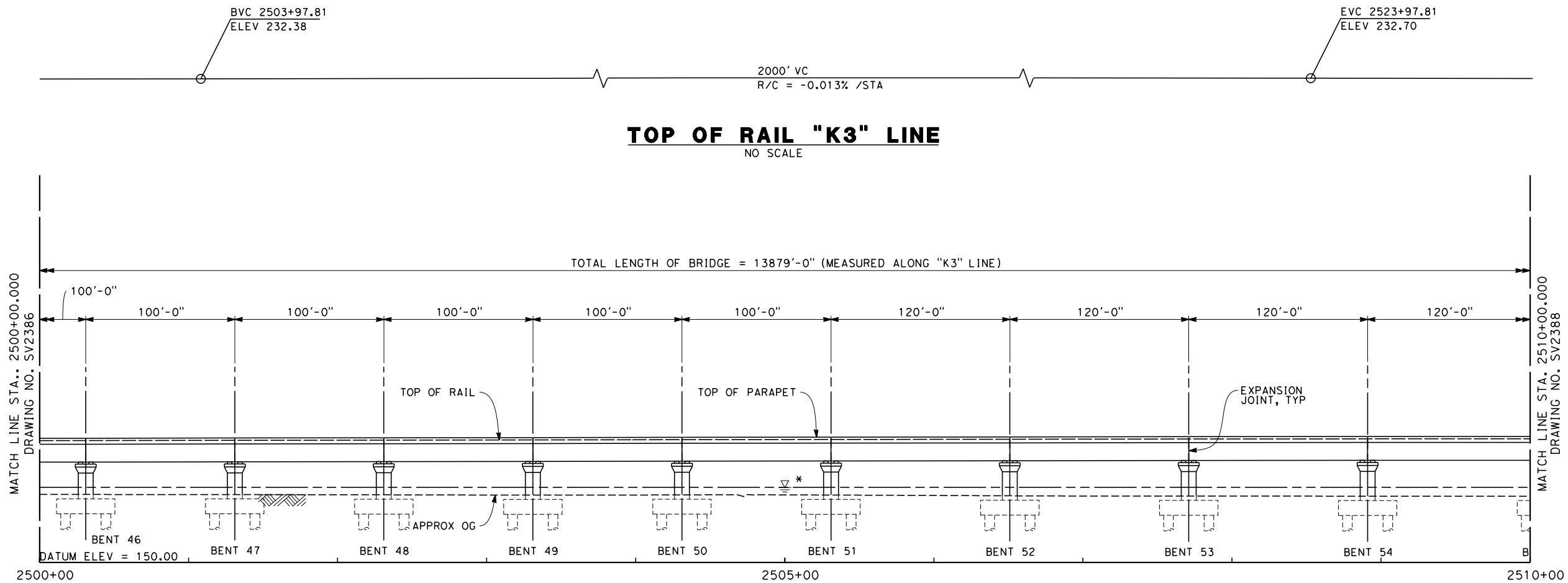


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

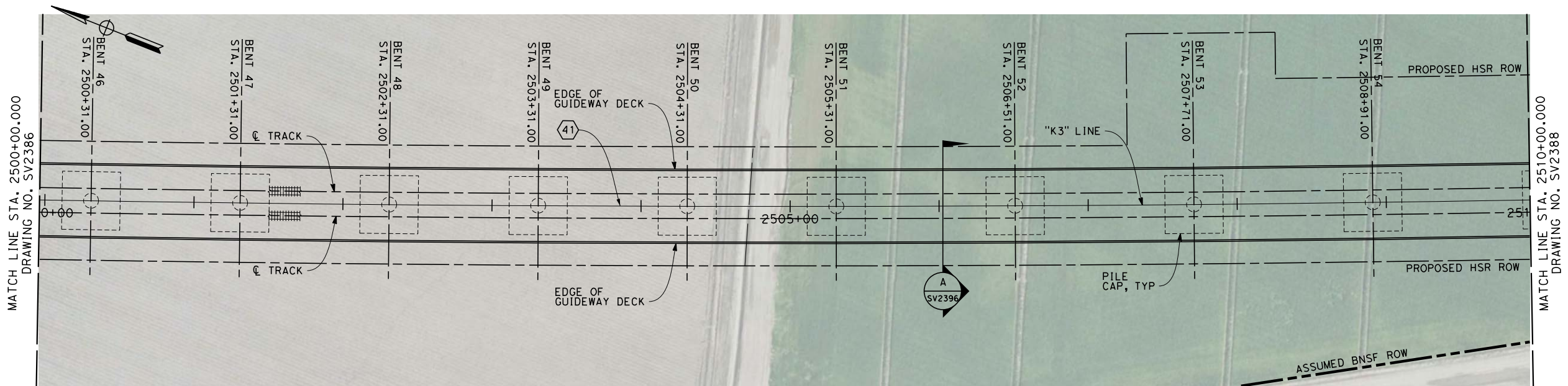
KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2386
SCALE AS SHOWN
SHEET NO. 7 OF 18

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
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3. SUPERSTRUCTURE CONSTRUCTION, UON
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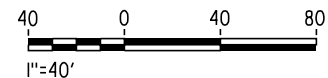
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

41

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T = 13199.6'
L = 24733.1'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
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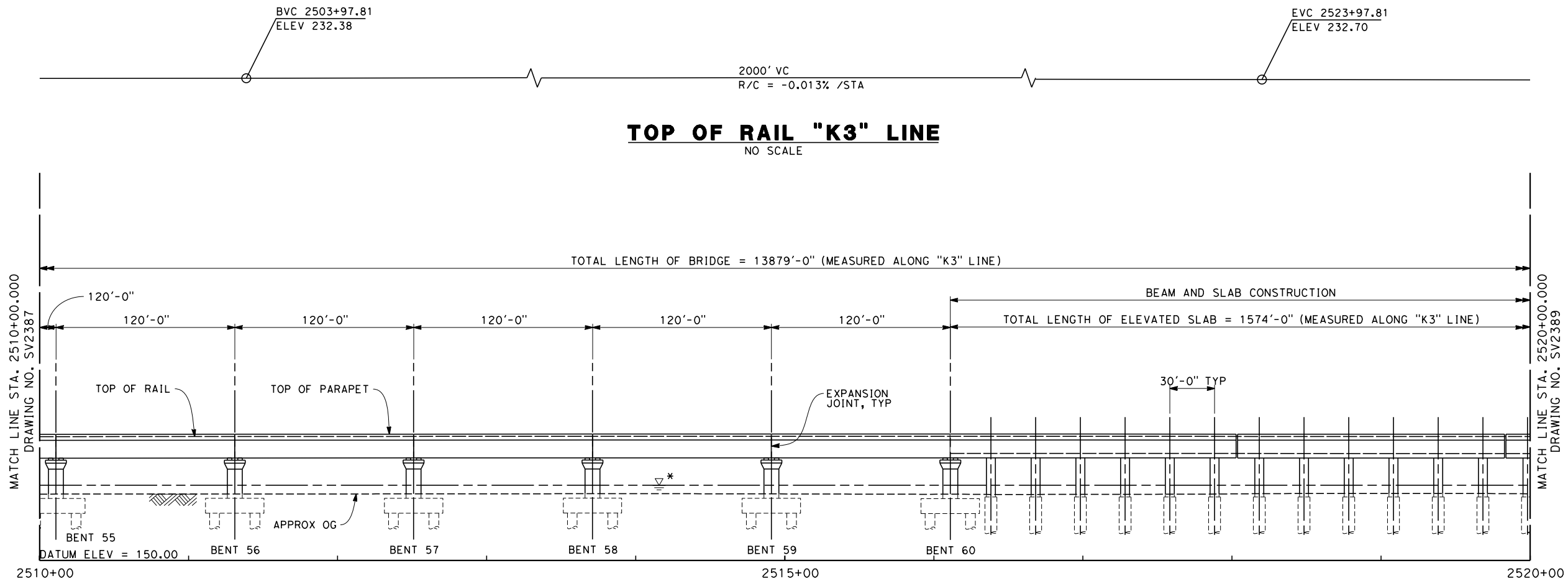
RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



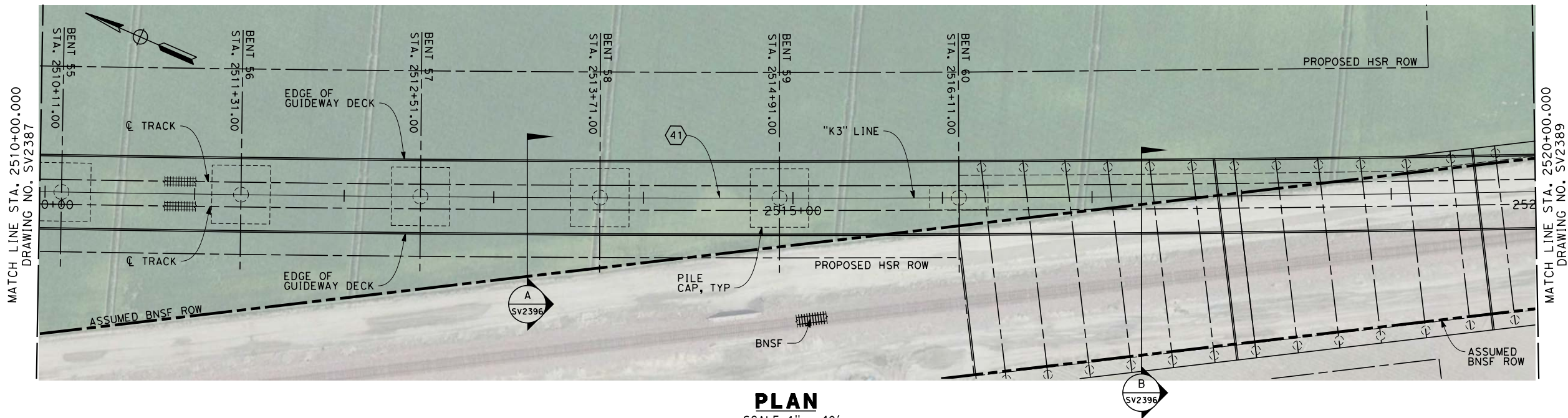
CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K3 CROSS CREEK VIADUCT PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2387
SCALE AS SHOWN
SHEET NO. 8 OF 18

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

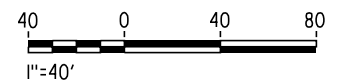
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
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- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

- ④1
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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
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DATE 12/31/13

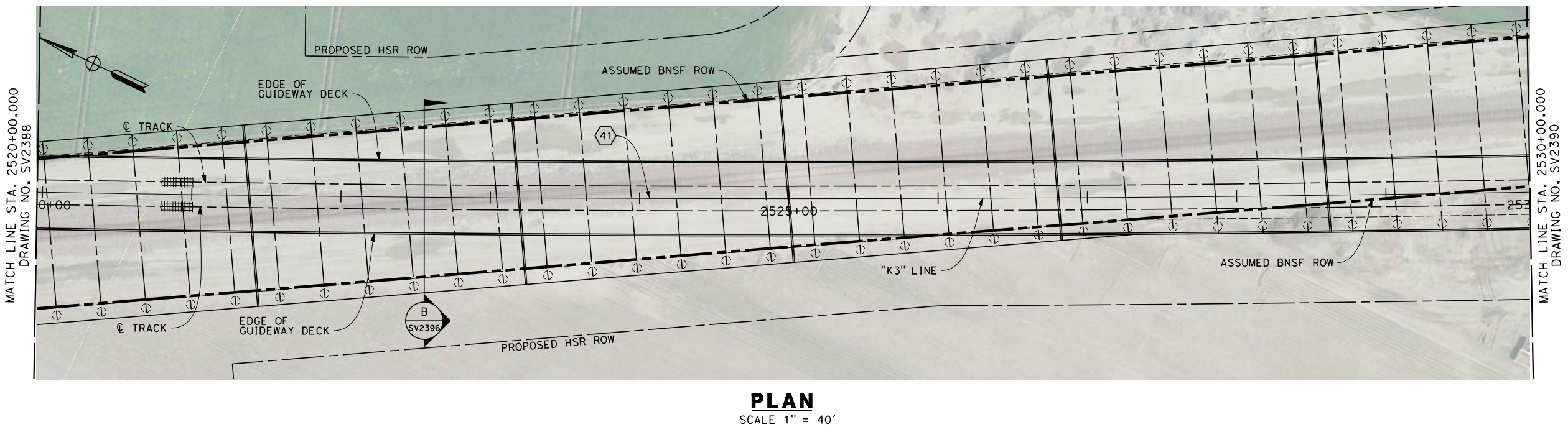
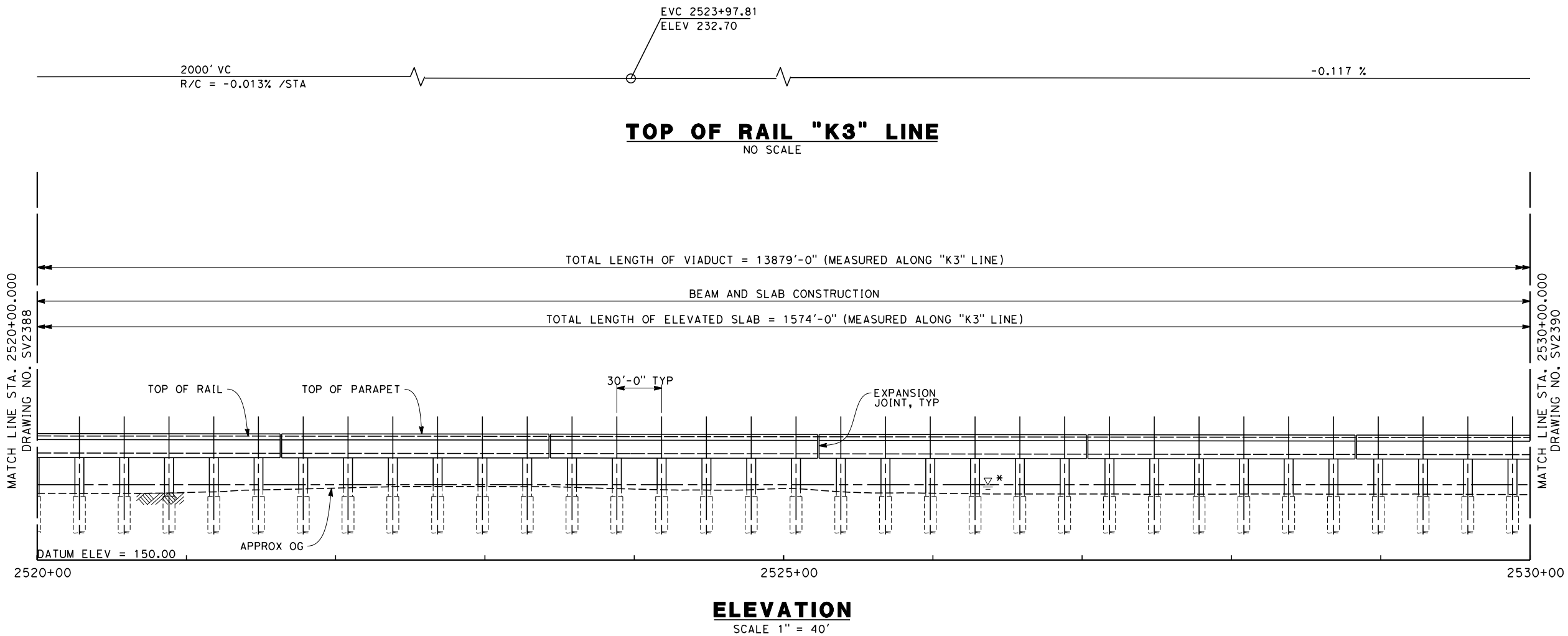
RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K3 CROSS CREEK VIADUCT PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2388
SCALE AS SHOWN
SHEET NO. 9 OF 18

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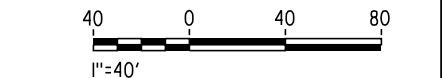
- NOTES**
1. NOT ALL PILES SHOWN
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- LEGEND:**
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CURVE DATA

41

R = 28600.00'
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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
PLAN AND ELEVATION

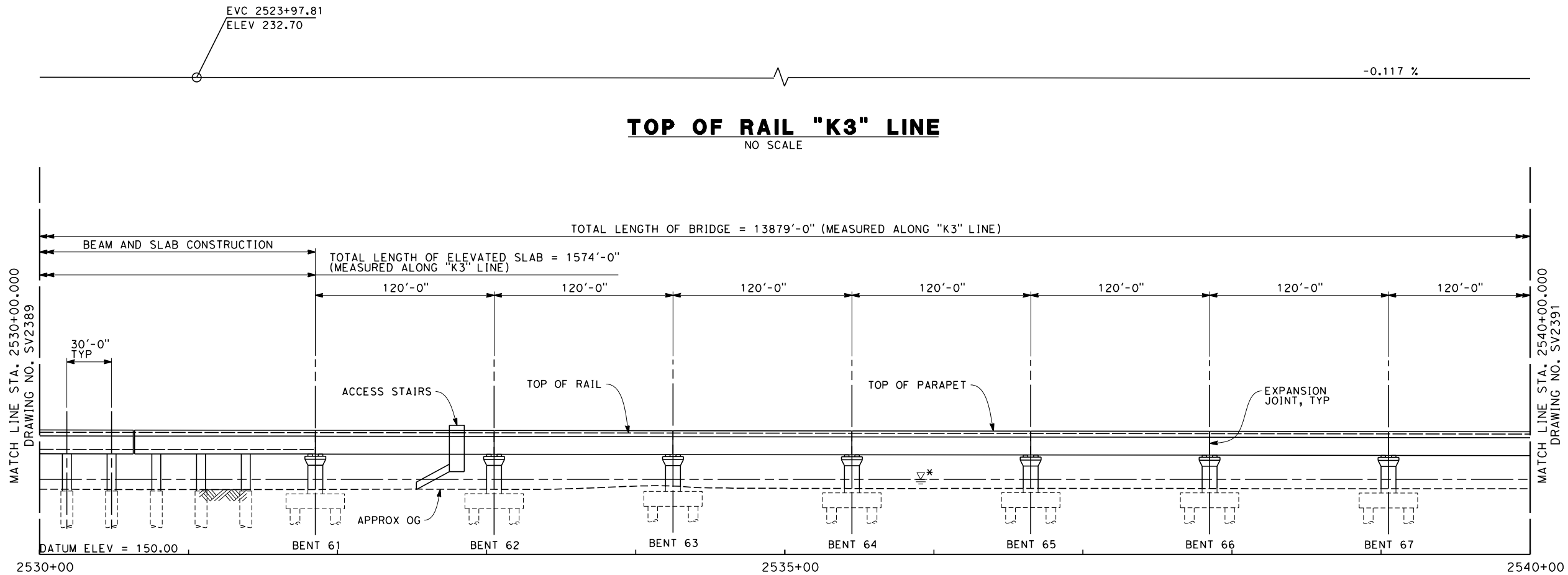
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2389

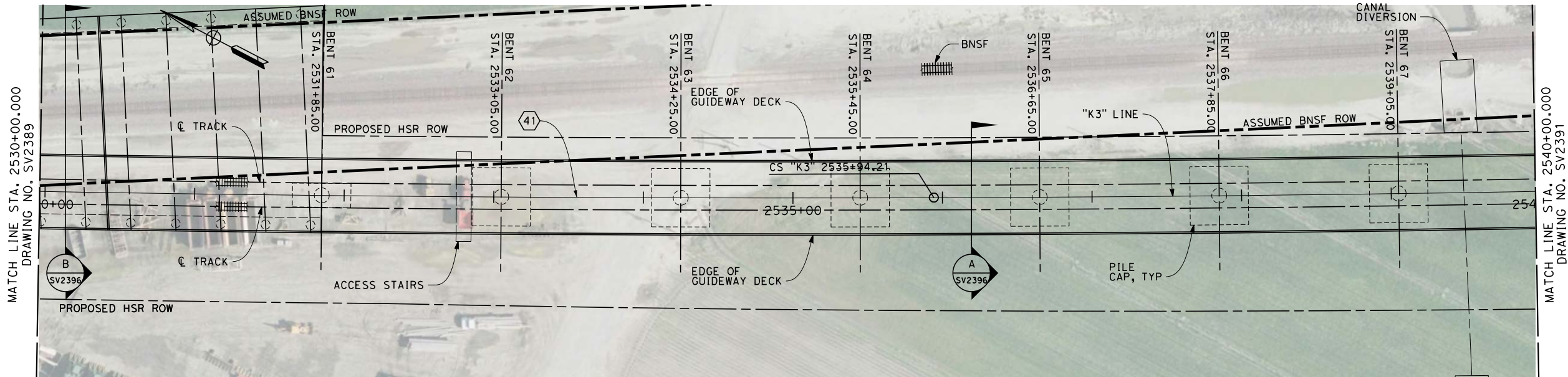
SCALE
AS SHOWN

SHEET NO.
10 OF 18

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
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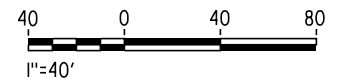
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

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REV	DATE	BY	CHK	APP	DESCRIPTION

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DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

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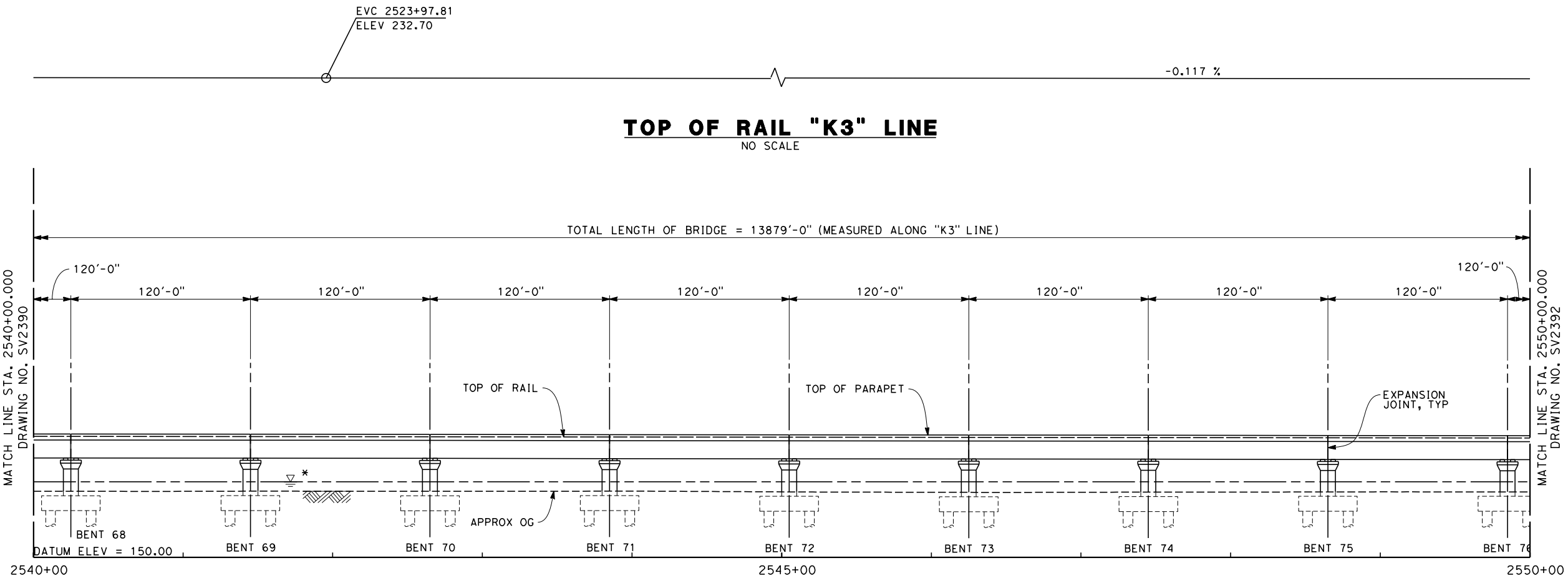


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

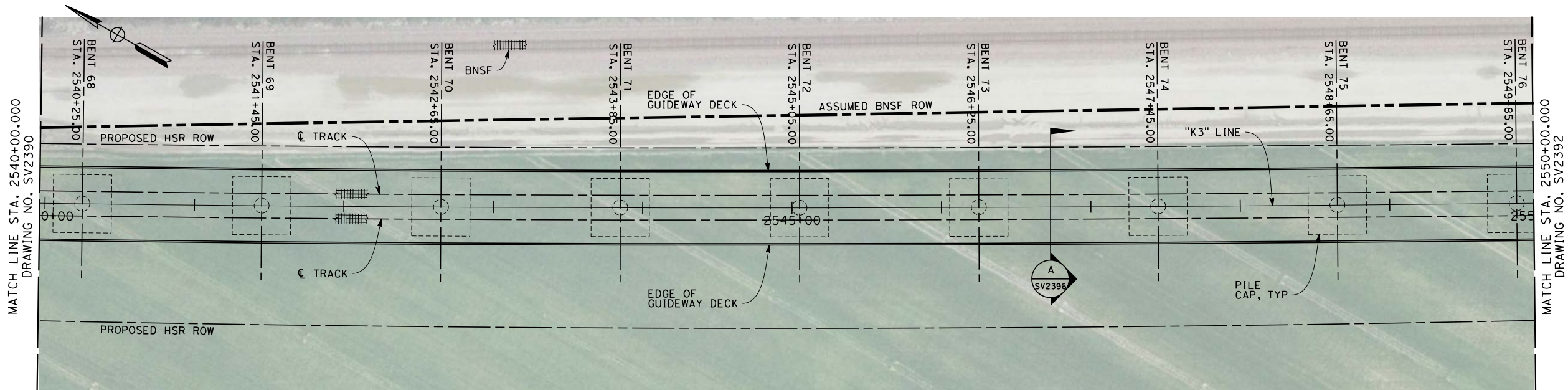
KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2390
SCALE AS SHOWN
SHEET NO. 11 OF 18

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ELEVATION
SCALE 1" = 40'



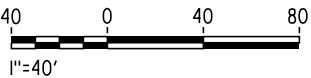
PLAN
SCALE 1" = 40'

NOTES

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LEGEND:

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REV	DATE	BY	CHK	APP	DESCRIPTION

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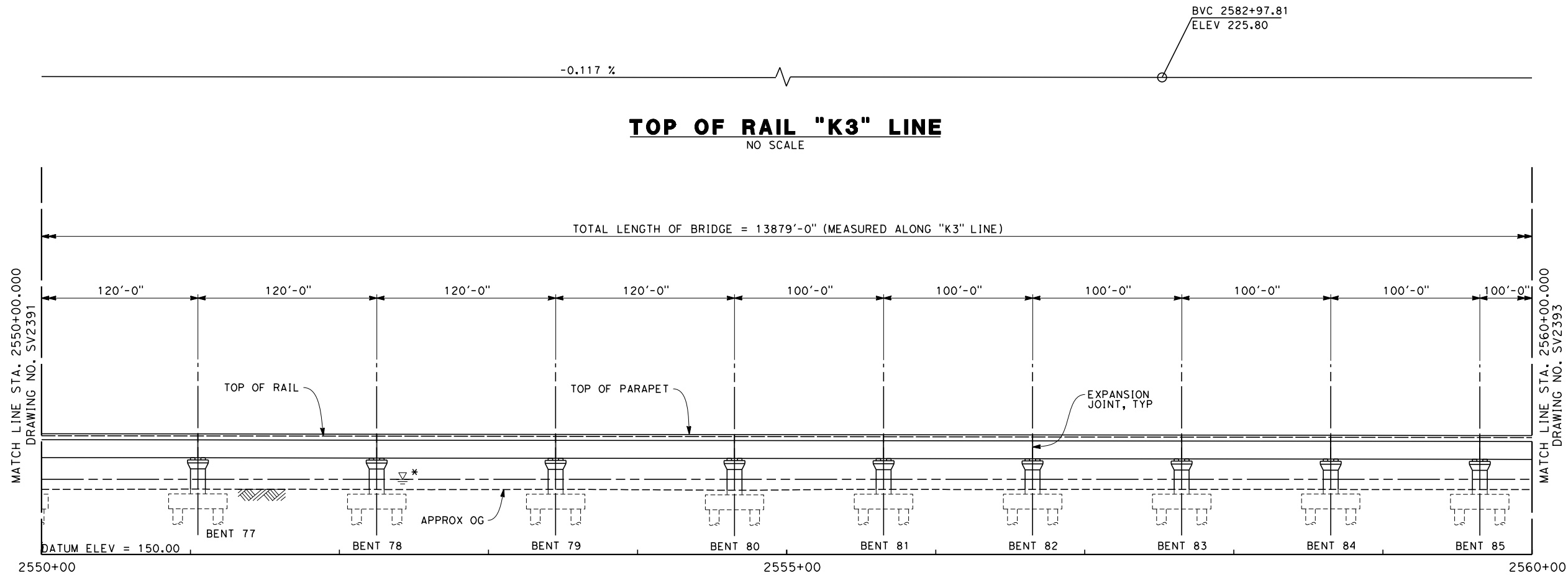
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NOT FOR CONSTRUCTION



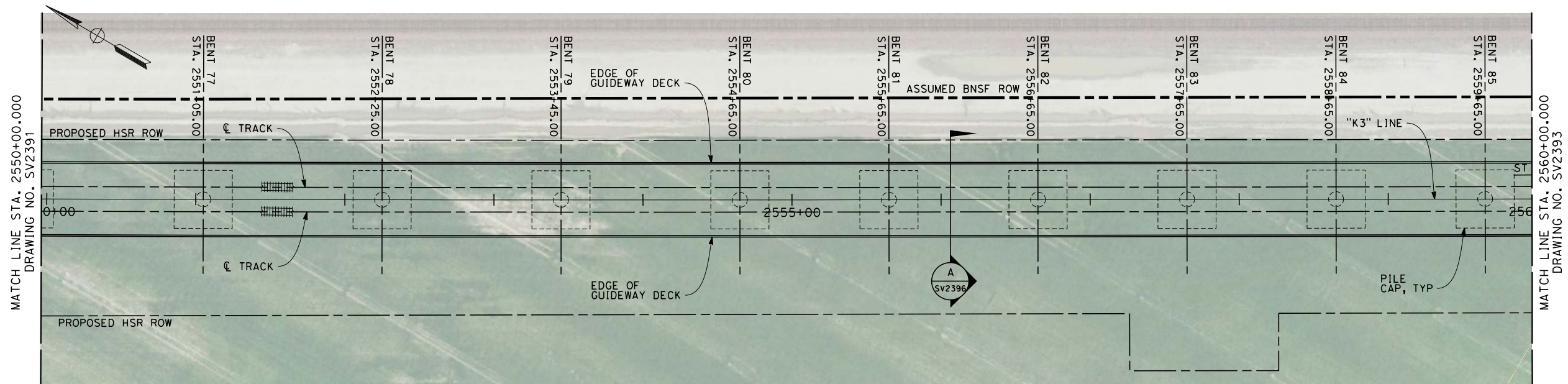
CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K3 CROSS CREEK VIADUCT PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2391
SCALE AS SHOWN
SHEET NO. 12 OF 18

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ELEVATION
SCALE 1" = 40'



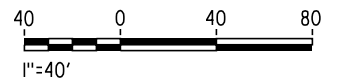
PLAN
SCALE 1" = 40'

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
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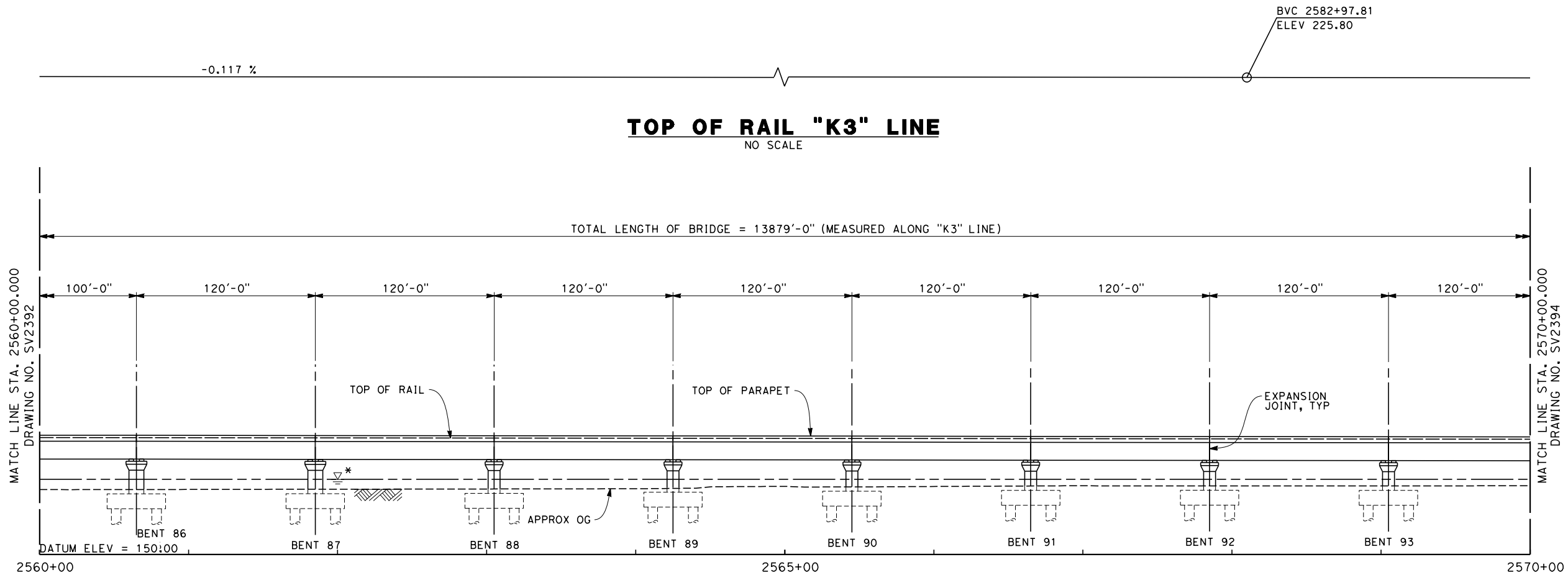


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

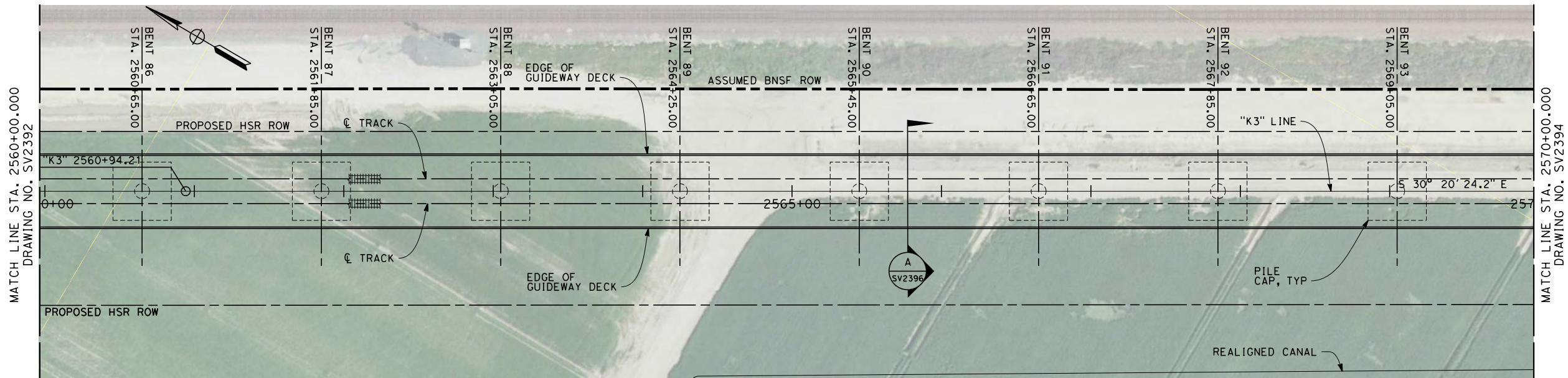
KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2392
SCALE AS SHOWN
SHEET NO. 13 OF 18

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12/23/2013 3:39:22 PM
frank.palermo



ELEVATION
SCALE 1" = 40'



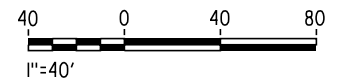
PLAN
SCALE 1" = 40'

NOTES

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

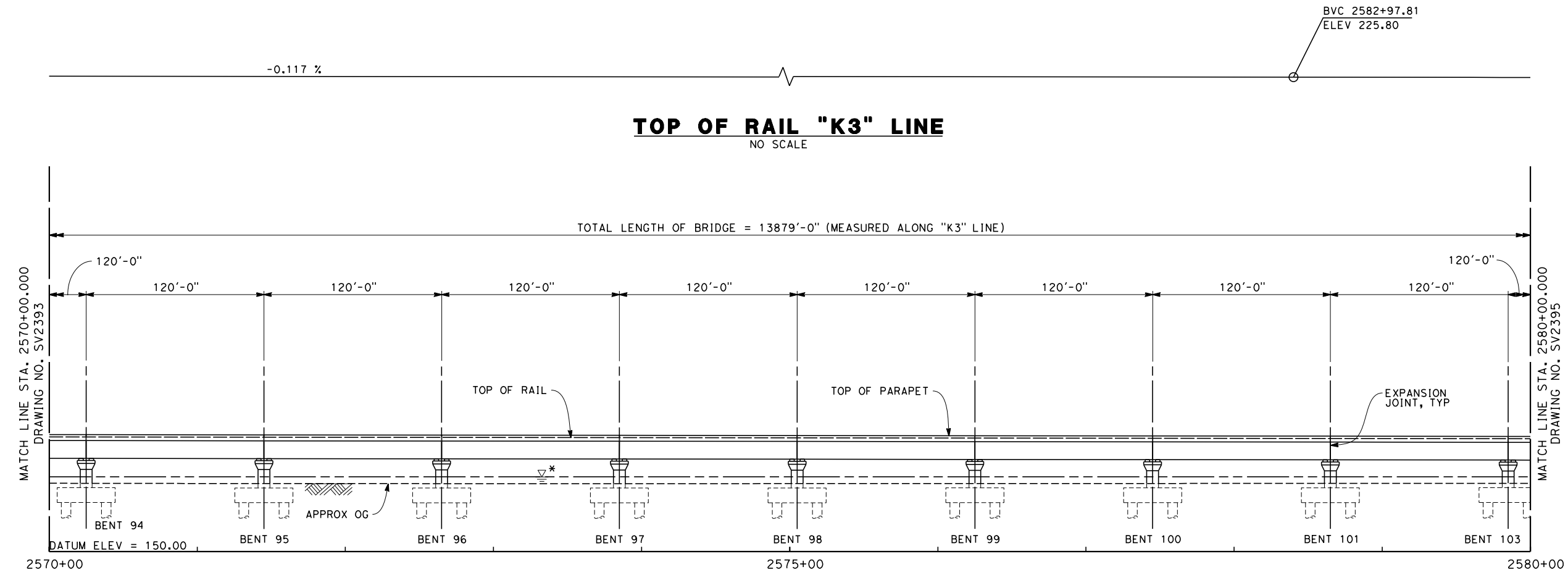


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

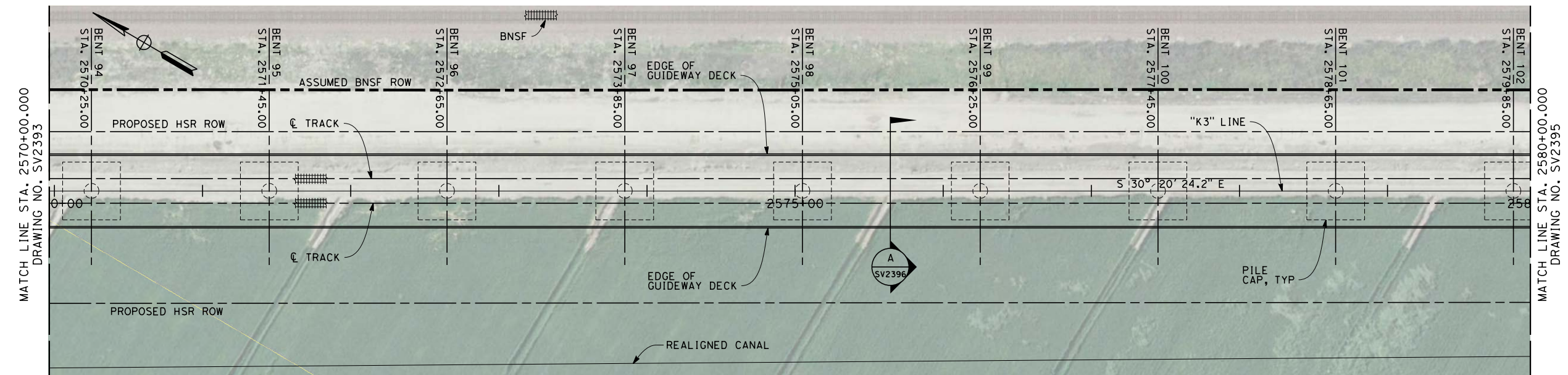
KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2393
SCALE AS SHOWN
SHEET NO. 14 OF 18

c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125235\FB-SV-2394-K3.dgn 12/23/2013 3:45:13 PM frank.palermo



ELEVATION
SCALE 1" = 40'



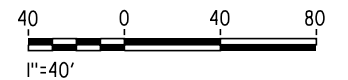
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

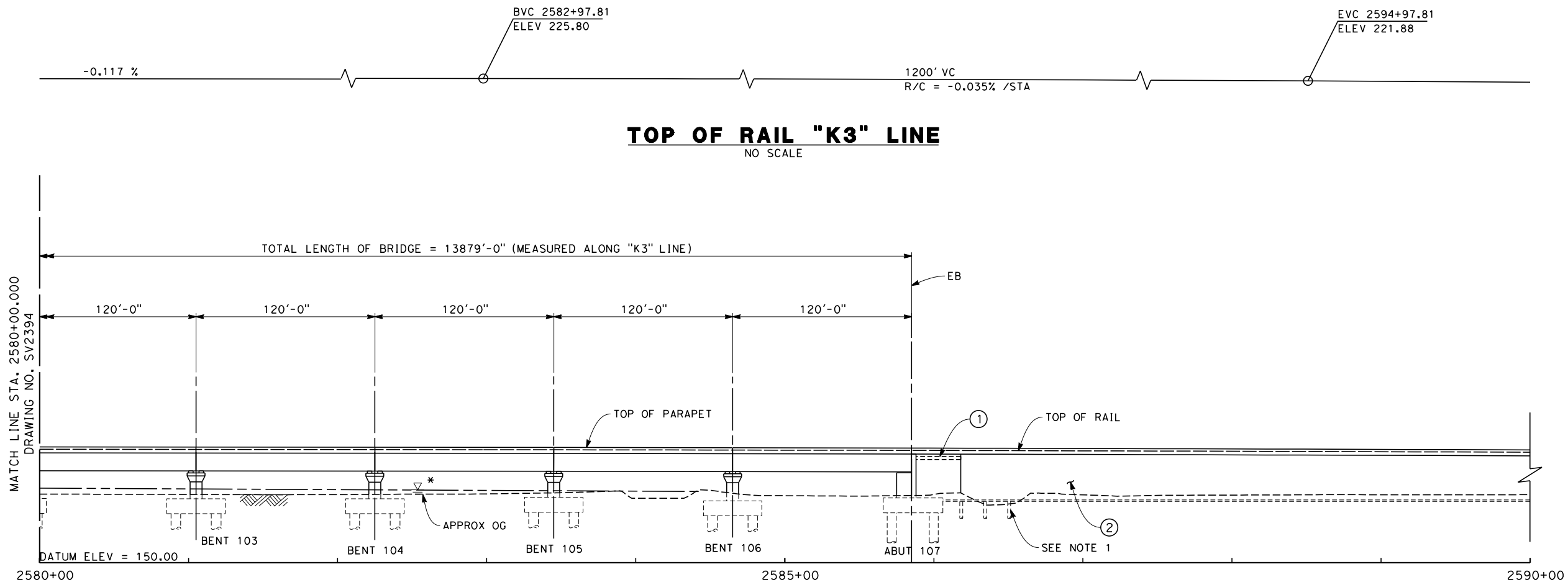


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

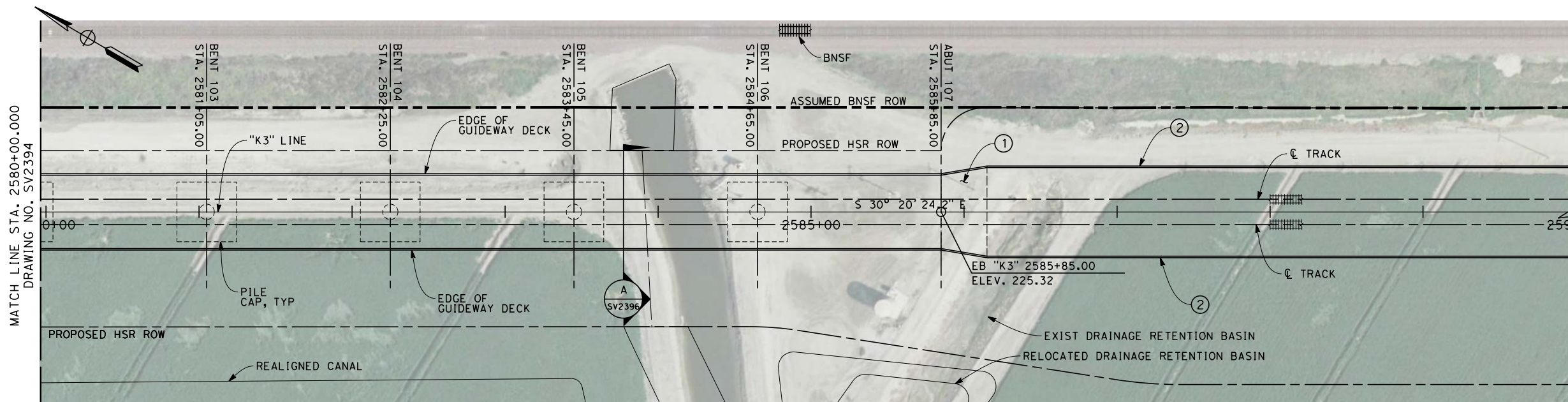
KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2394
SCALE AS SHOWN
SHEET NO. 15 OF 18

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12/23/2013 3:49:07 PM
frank.palermo



ELEVATION
SCALE 1" = 40'



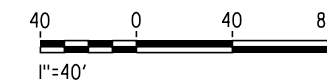
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

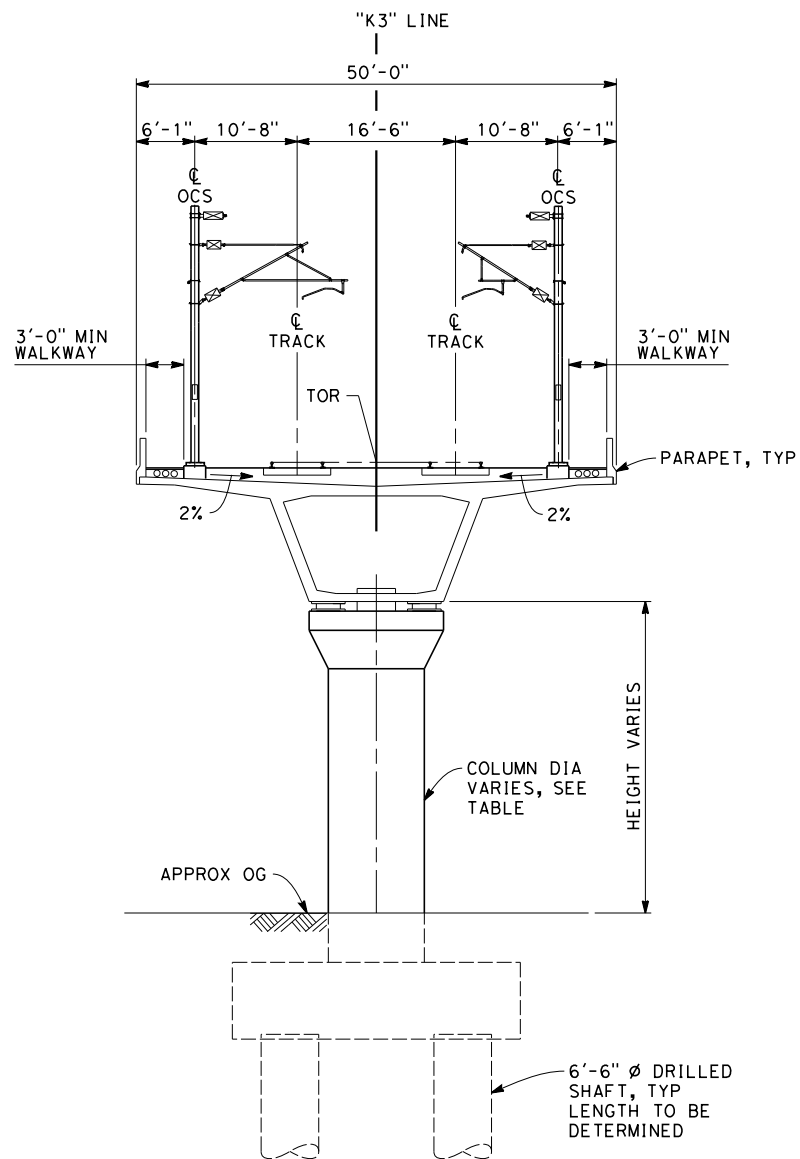
RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K3 CROSS CREEK VIADUCT PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2395
SCALE AS SHOWN
SHEET NO. 16 OF 18

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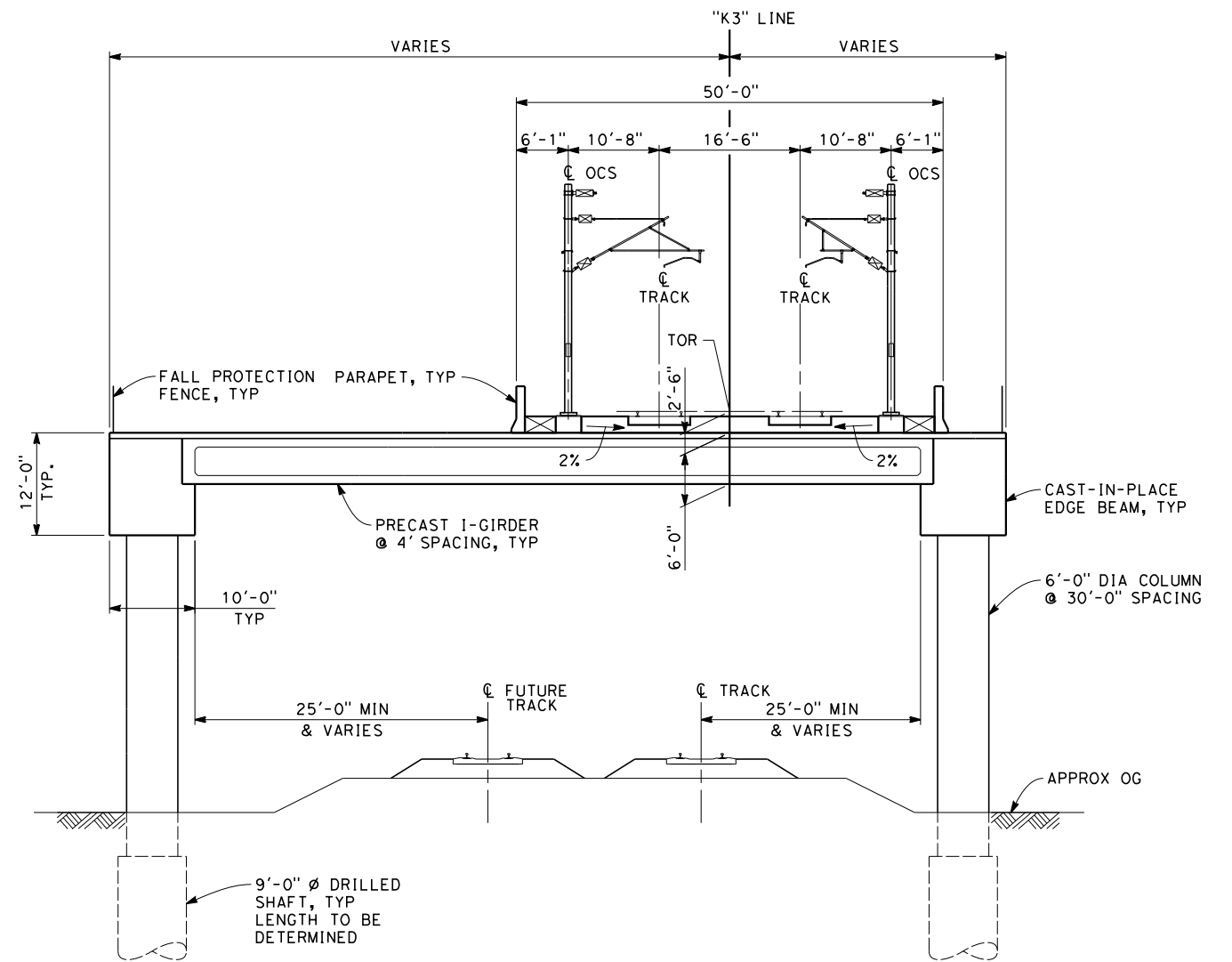
COLUMN DIAMETERS	
HEIGHT TO SOFFIT	DIAMETER
< 20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT

SECTION A

SCALE: 1" = 10'

STA 2447+06.00 THROUGH 2483+27.50
STA 2486+49.50 THROUGH 2516+11.00
STA 2530+65.00 THROUGH 2585+85.00

NOTE:
1. MINIMUM DIMENSION FROM SOFFIT TO
TOP OF FOUNDATION SHALL BE 16'.



SECTION B

SCALE: 1" = 10'

STA 2516+11.00 THROUGH 2531+85



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION

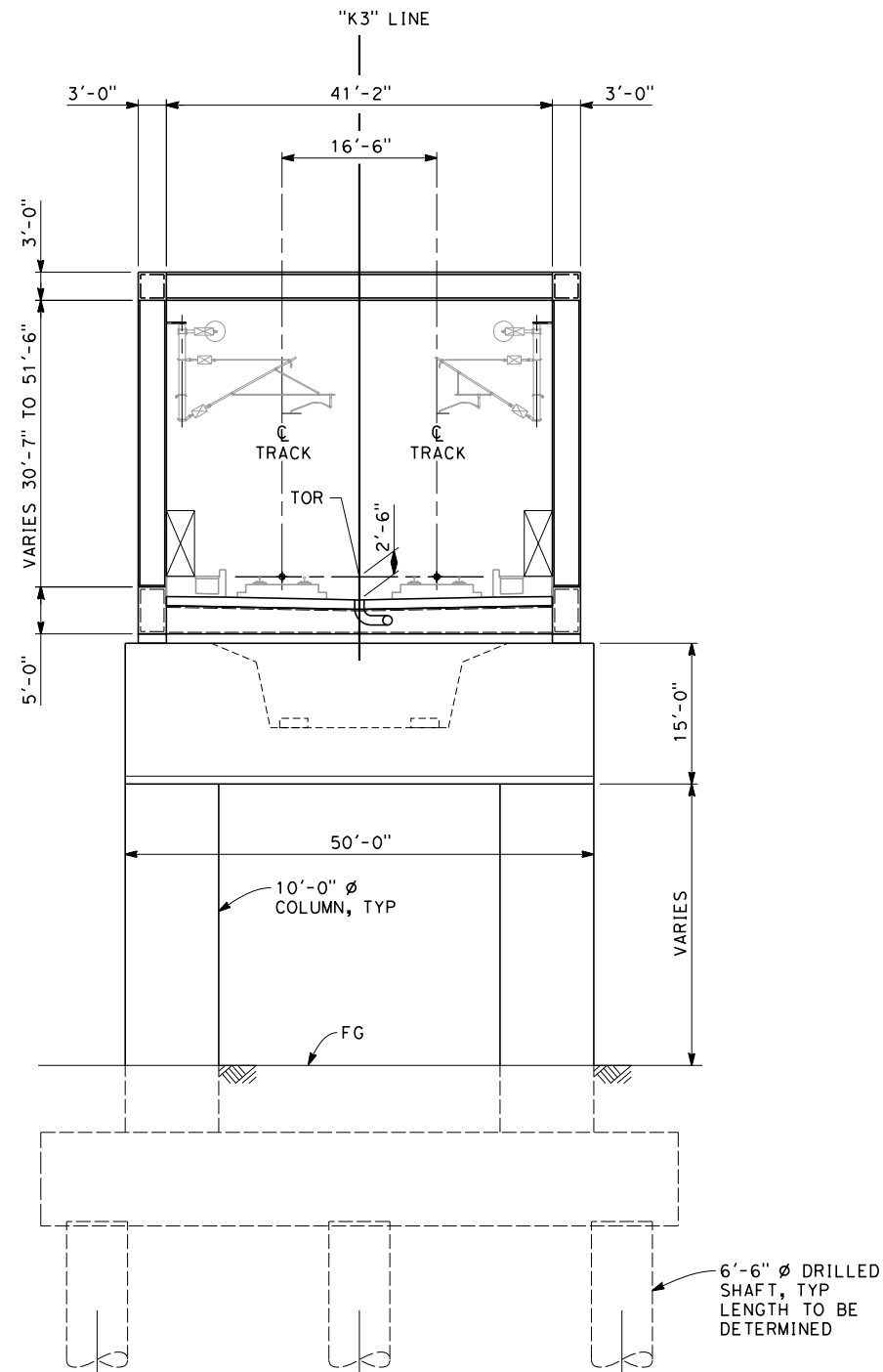


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K3
CROSS CREEK VIADUCT
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2396
SCALE AS SHOWN
SHEET NO. 17 OF 18

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andrew.armstrong 2/12/2013 1:54:27 PM



SECTION C

SCALE: 1" = 10'

STA 2483+27.50 THROUGH 2486+49.50



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K3 CROSS CREEK VIADUCT TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2397
SCALE AS SHOWN
SHEET NO. 18 OF 18

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andrew.armstrong 12/12/2013 1:54:45 PM



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY E. SUDHAUSEN
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

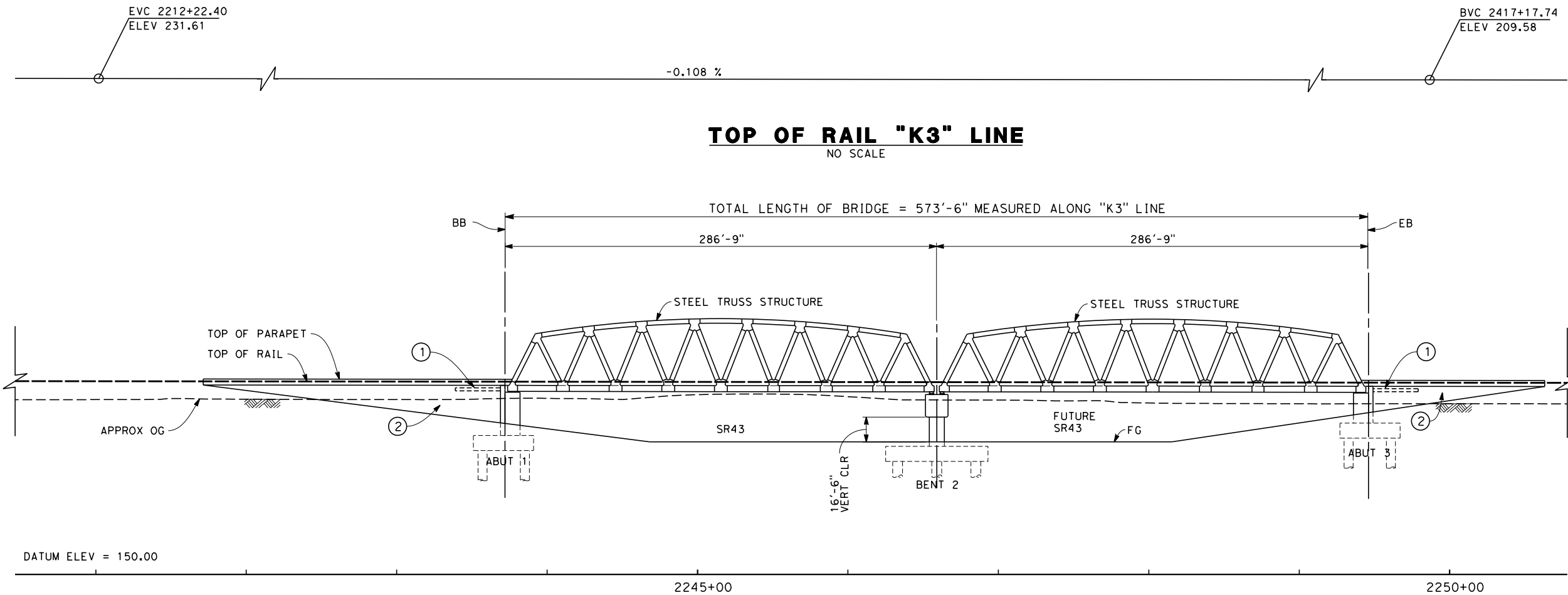
RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



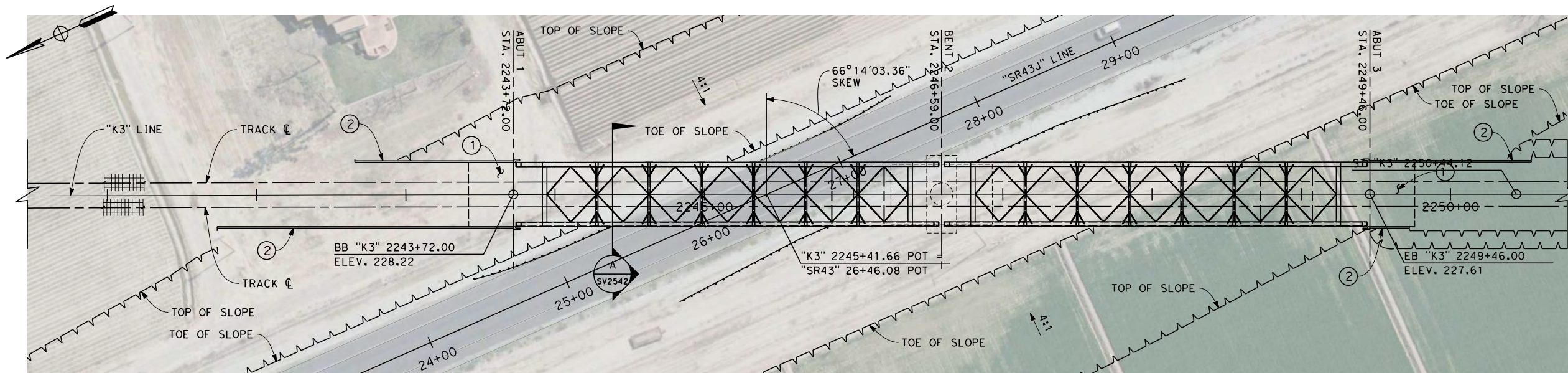
CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K3 STATE ROUTE 43 UNDERPASS KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2540
SCALE AS SHOWN
SHEET NO. 1 OF 3

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andrew.armstrong 2/12/2013 1:55:12 PM



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY J. VALENZUELA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

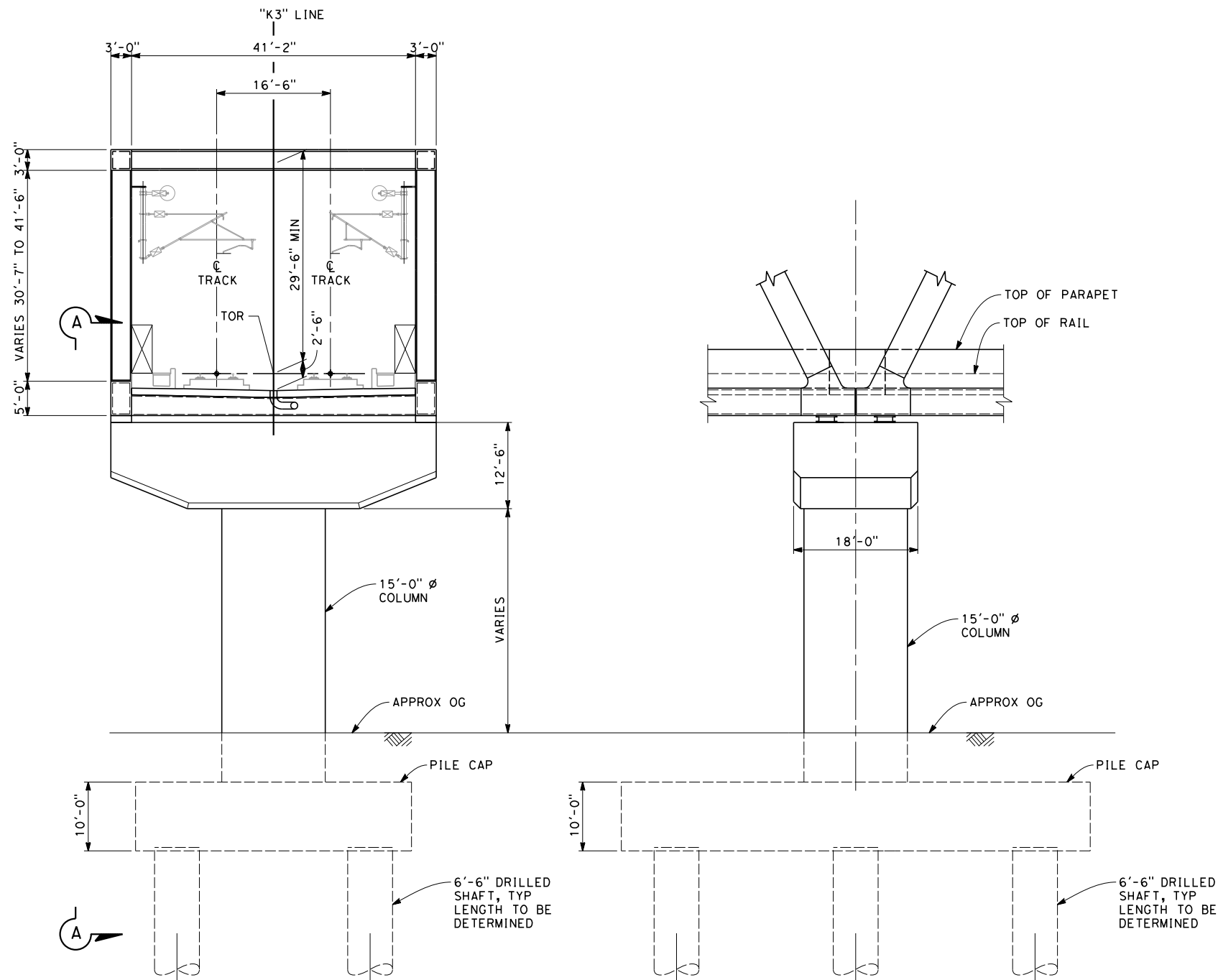
RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K3 STATE ROUTE 43 UNDERPASS PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2541
SCALE AS SHOWN
SHEET NO. 2 OF 3

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SECTION A
SCALE: 1" = 10'

SECTION A-A
SCALE: 1" = 10'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY Y. REN
DRAWN BY D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K3
STATE ROUTE 43 UNDERPASS
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2542
SCALE AS SHOWN
SHEET NO. 3 OF 3

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LEGEND

—+— EXISTING FREIGHT RAILROAD

— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY E. SUDHAUSEN
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

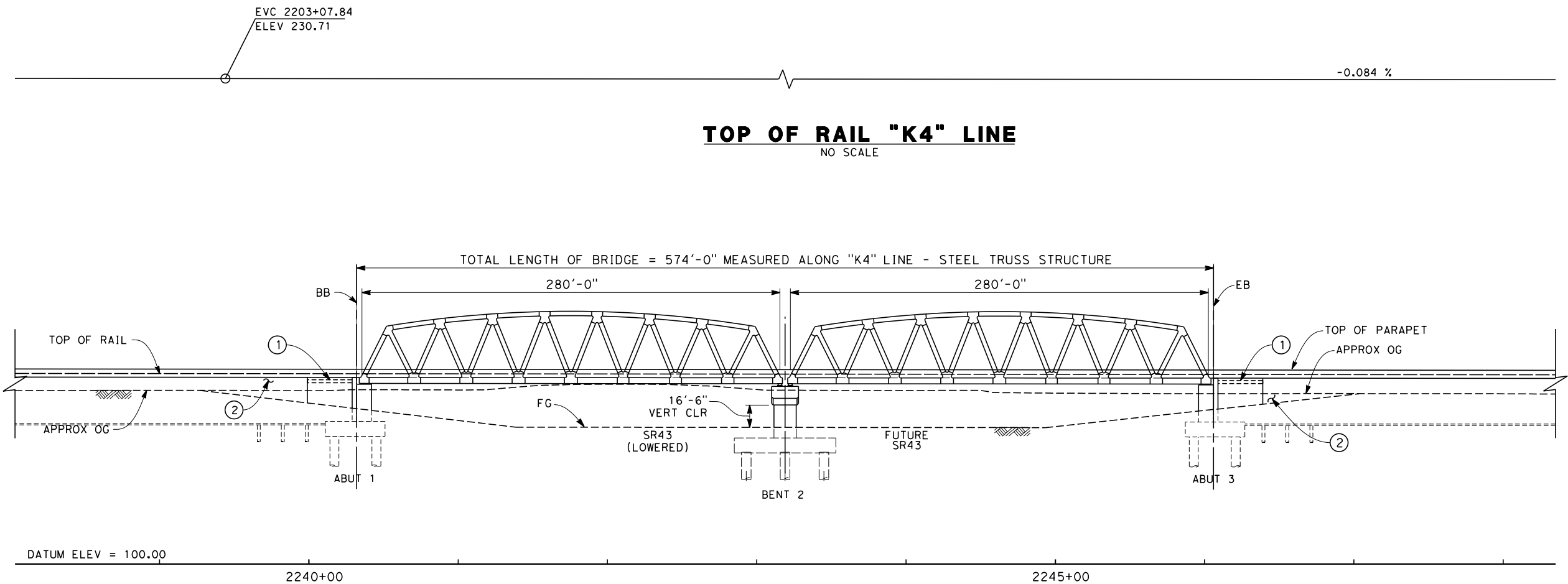


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

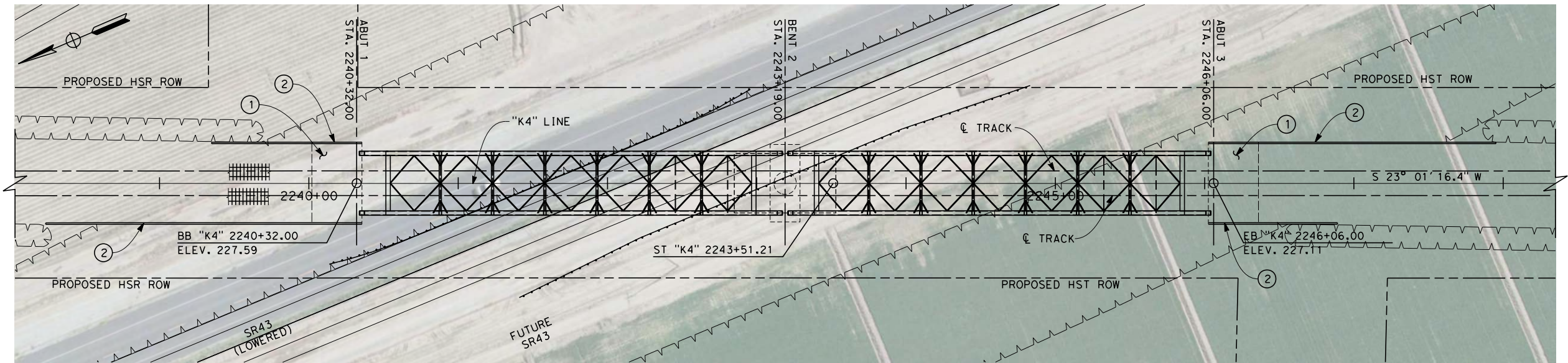
KAWEAH SUBSECTION
ALIGNMENT K4
STATE ROUTE 43 UNDERPASS
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2450
SCALE AS SHOWN
SHEET NO. 1 OF 3

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S.T. MAK
DRAWN BY J. VALENZUELA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

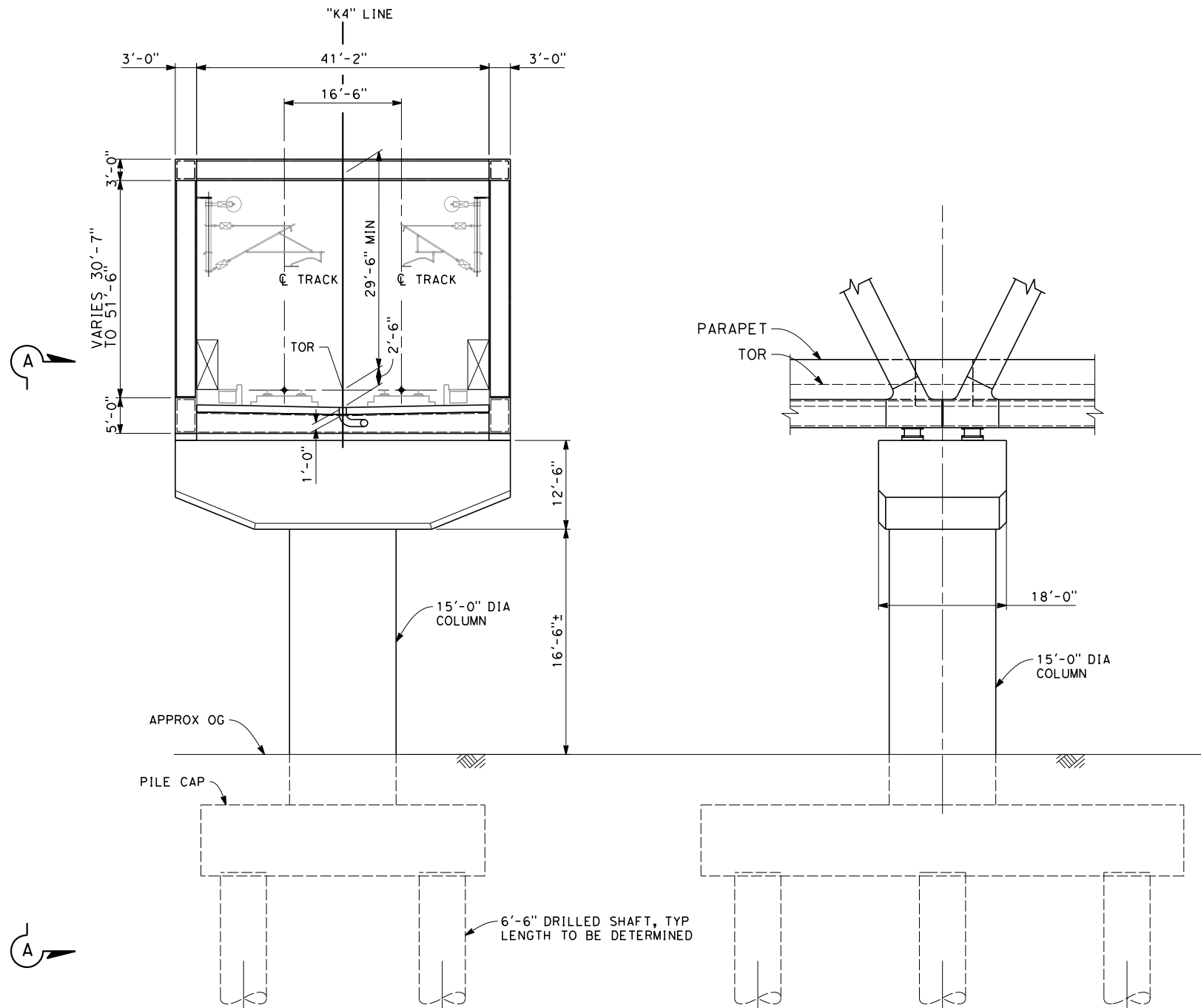


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K4
STATE ROUTE 43 UNDERPASS
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2451
SCALE AS SHOWN
SHEET NO. 2 OF 3

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SECTION A
SCALE: 1" = 10'

SECTION A-A
SCALE: 1" = 10'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY Y. REN
DRAWN BY D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K4
STATE ROUTE 43 UNDERPASS
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2452
SCALE AS SHOWN
SHEET NO. 3 OF 3

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LEGEND

—+— EXISTING FREIGHT RAILROAD

— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
E. SUDHAUSEN

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

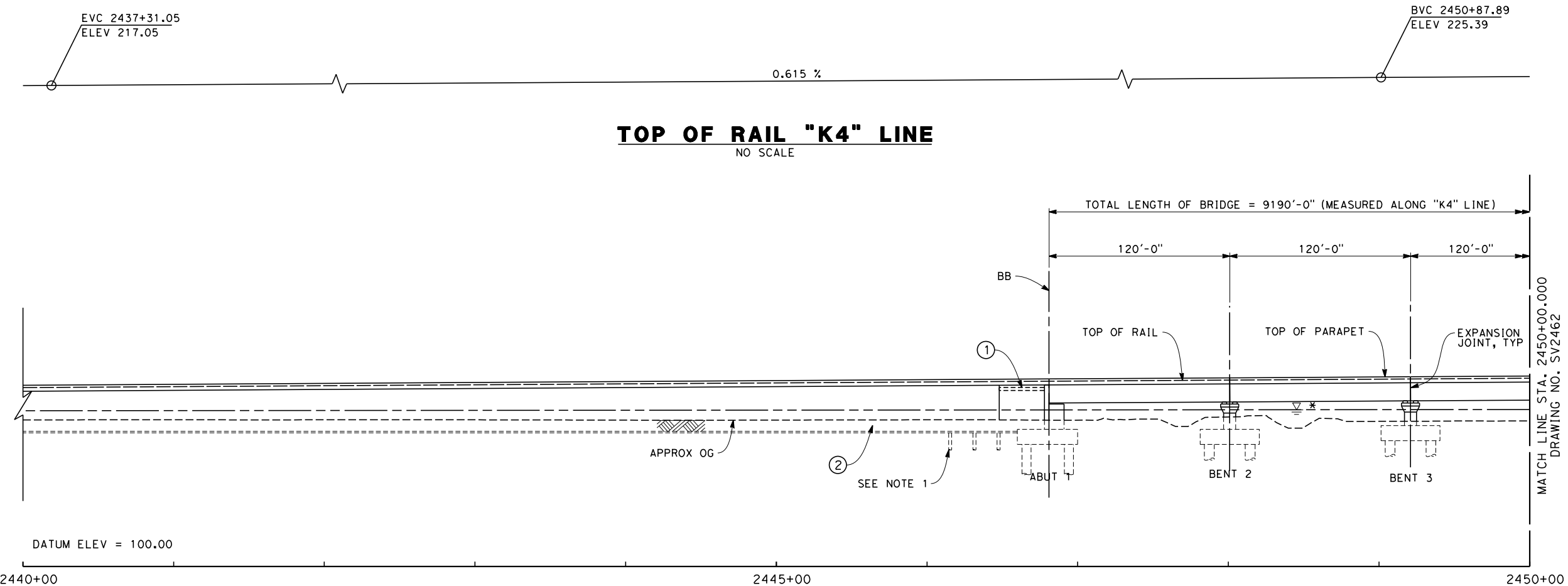
KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
KEY MAP

CONTRACT NO.
HSR 06-0003

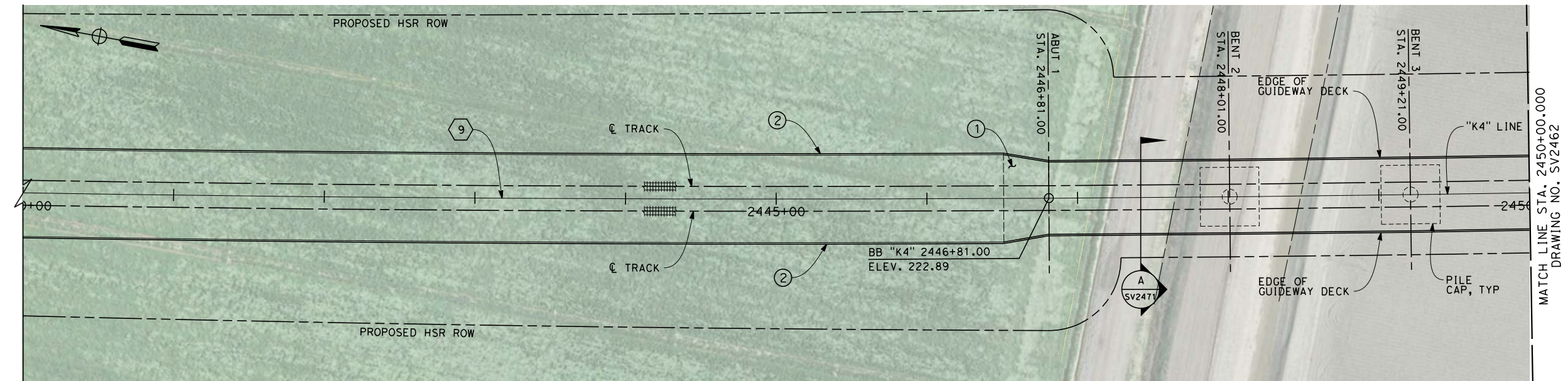
DRAWING NO.
SV2460

SCALE
AS SHOWN

SHEET NO.
1 OF 13



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

- ⑨
- R = 30500.00'
- Δ = 49° 01' 18.3"
- T = 13906.6'
- L = 26095.5'



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

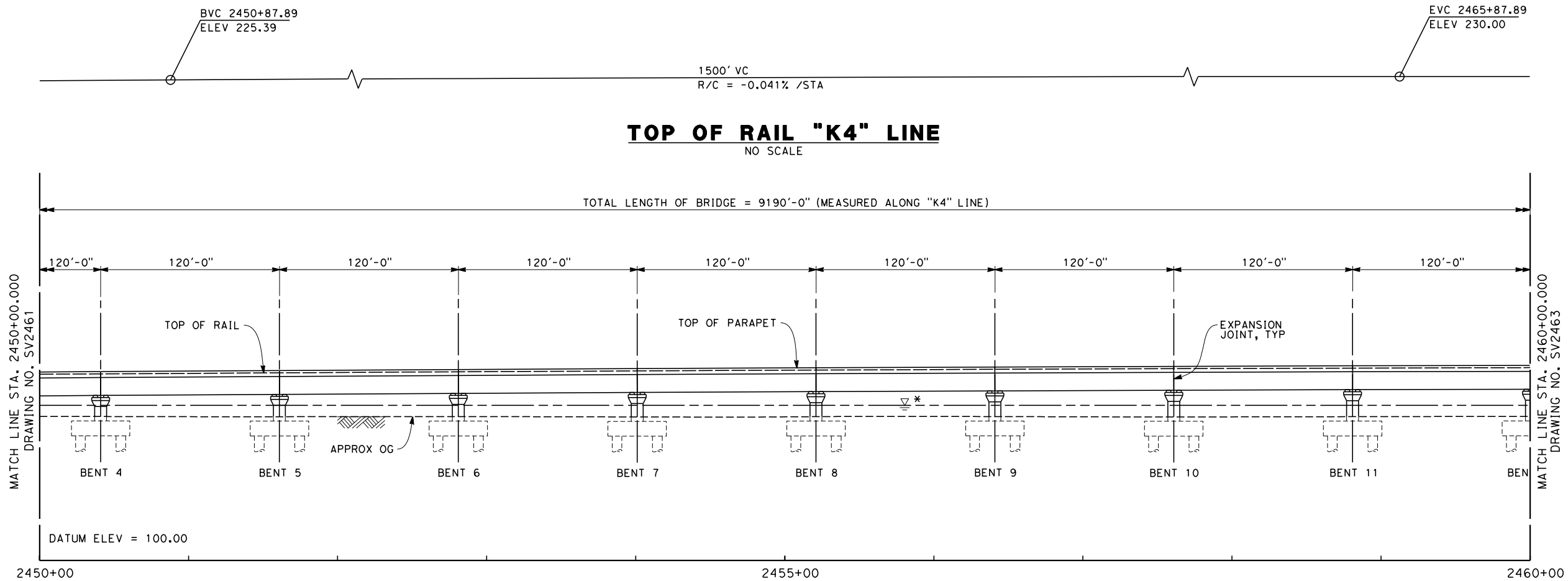
RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



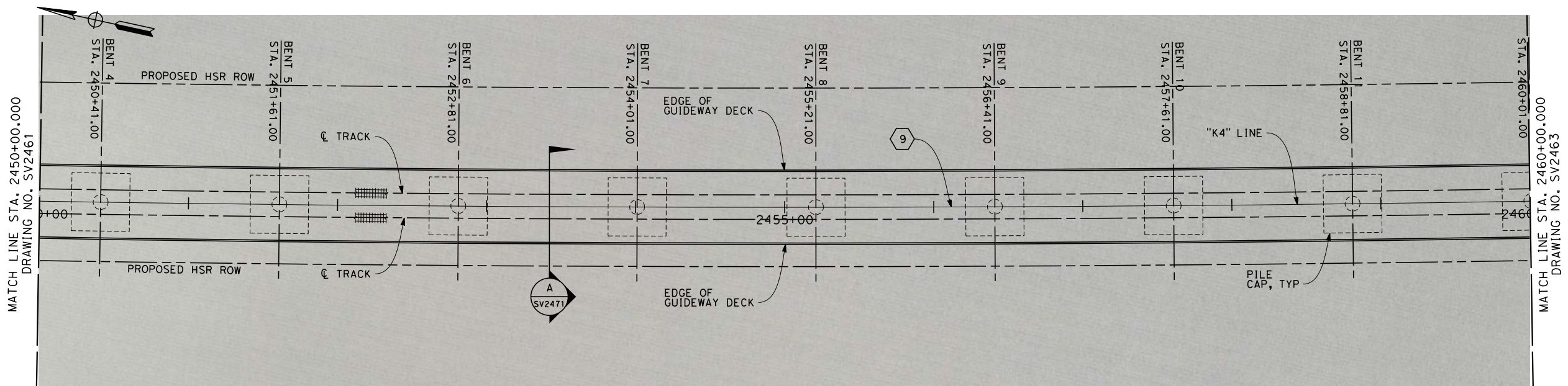
CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD
KAWEAH SUBSECTION ALIGNMENT K4 CROSS CREEK VIADUCT PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2461
SCALE AS SHOWN
SHEET NO. 2 OF 13

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑨
R = 30500.00'
Δ = 49° 01' 18.3"
T = 13906.6'
L = 26095.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

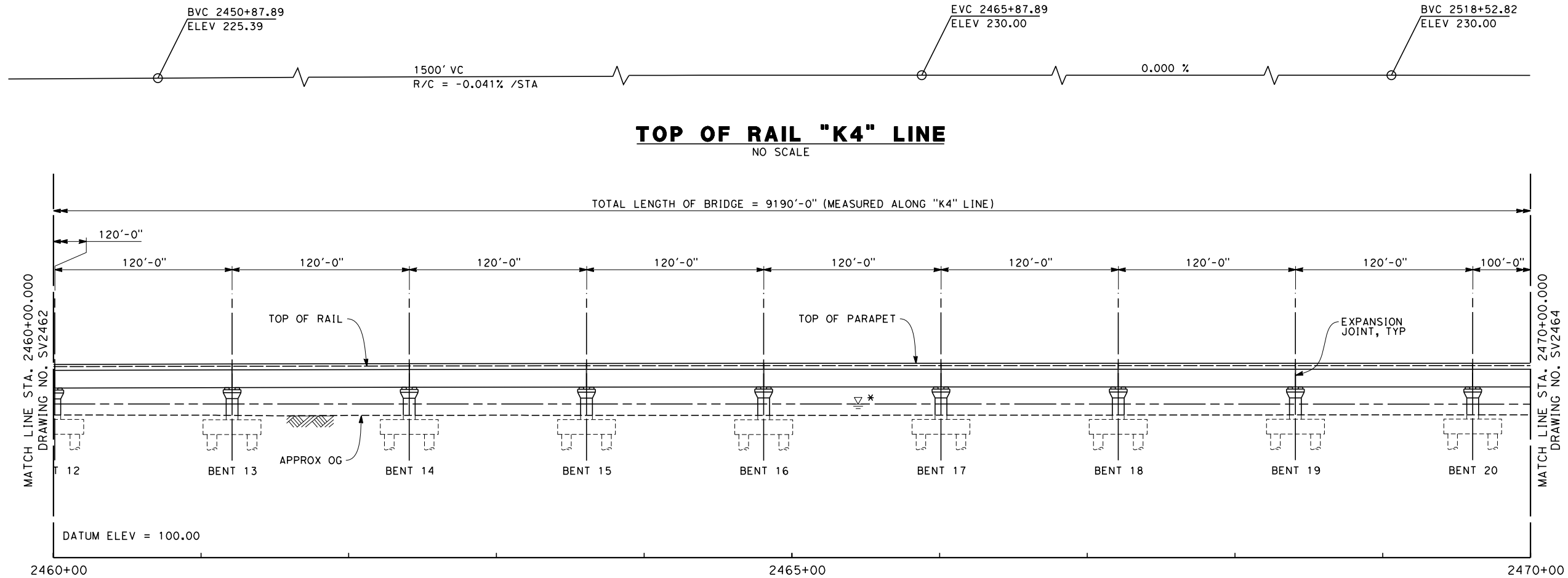


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

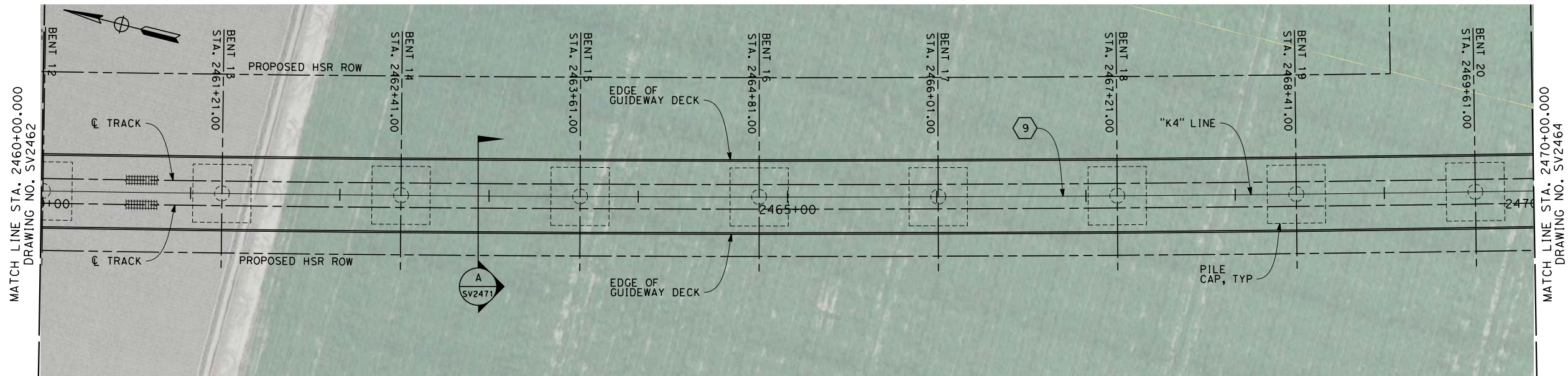
KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2462
SCALE AS SHOWN
SHEET NO. 3 OF 13

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

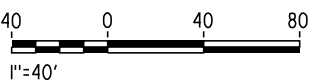
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

- ⑨
R = 30500.00'
Δ = 49° 01' 18.3"
T = 13906.6'
L = 26095.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

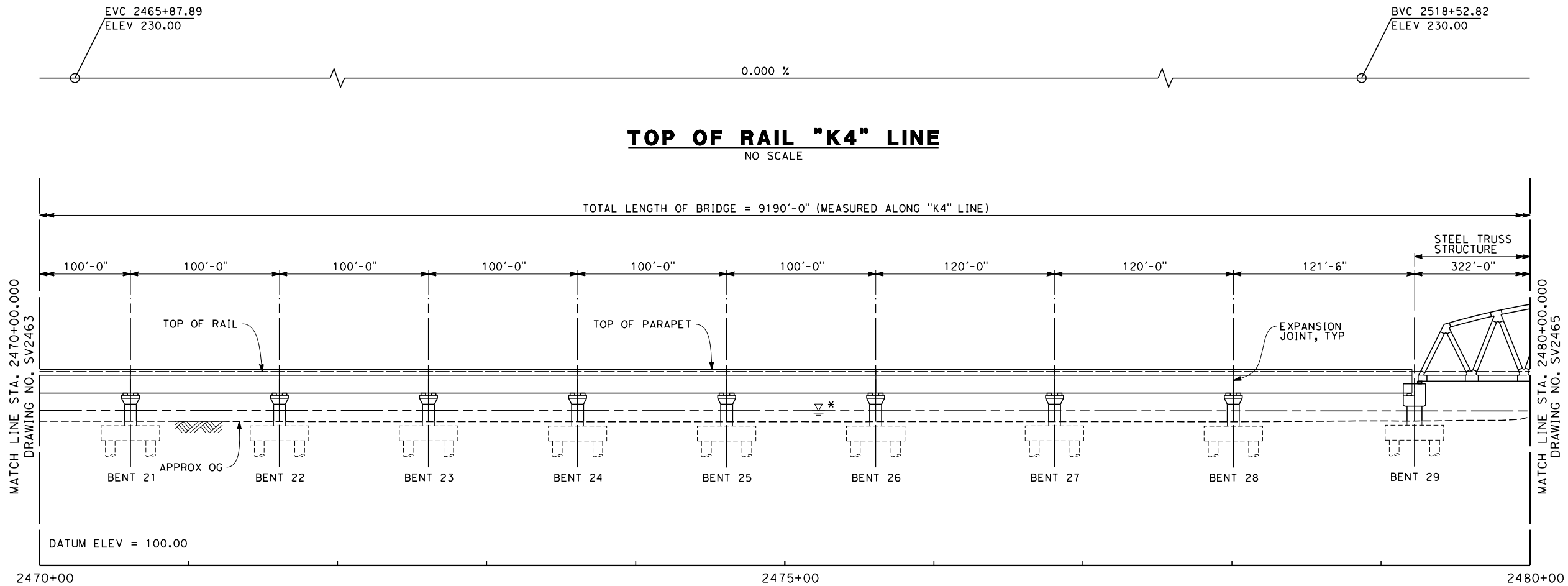


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

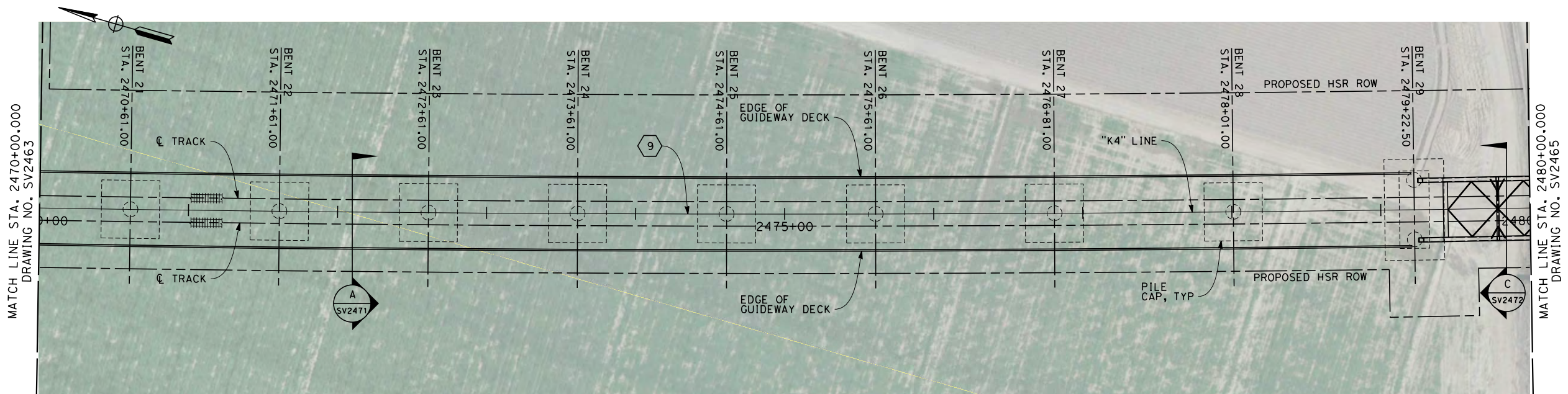
KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2463
SCALE AS SHOWN
SHEET NO. 4 OF 13

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

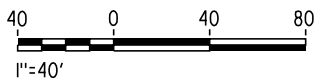
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

- ⑨
- R = 30500.00'
- Δ = 49° 01' 18.3"
- T = 13906.6'
- L = 26095.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

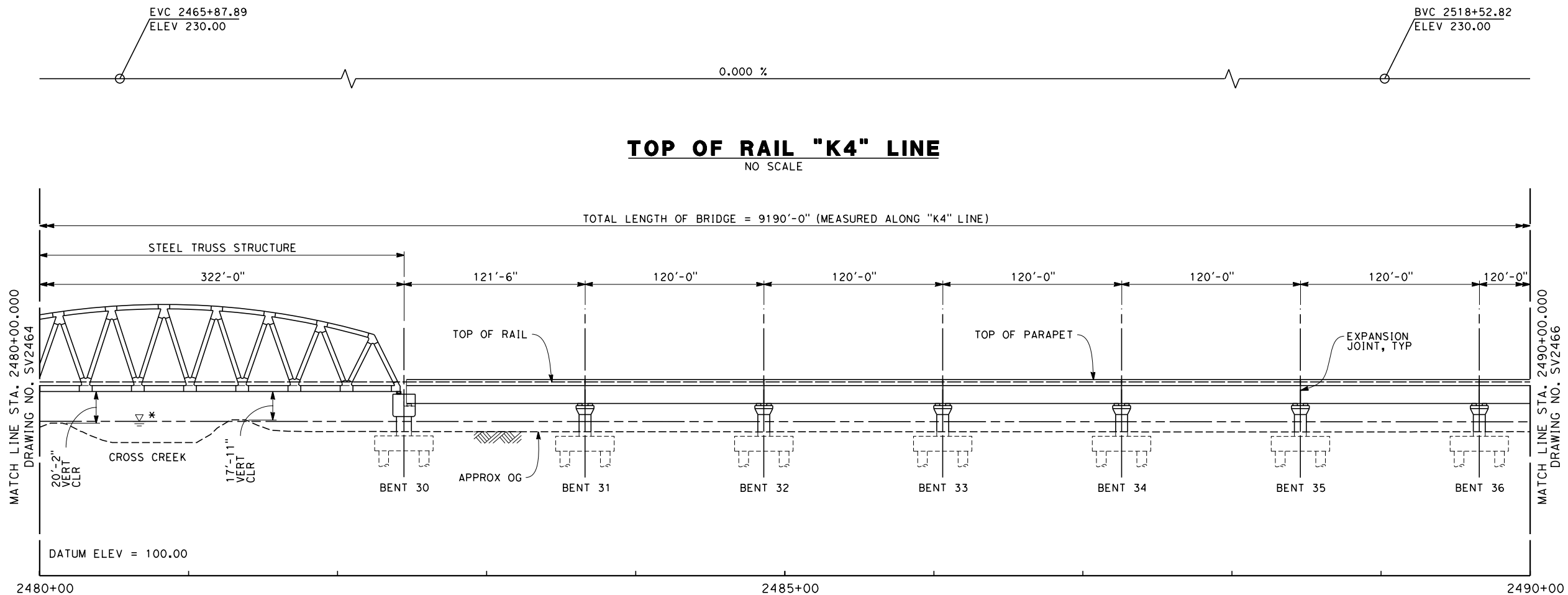


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

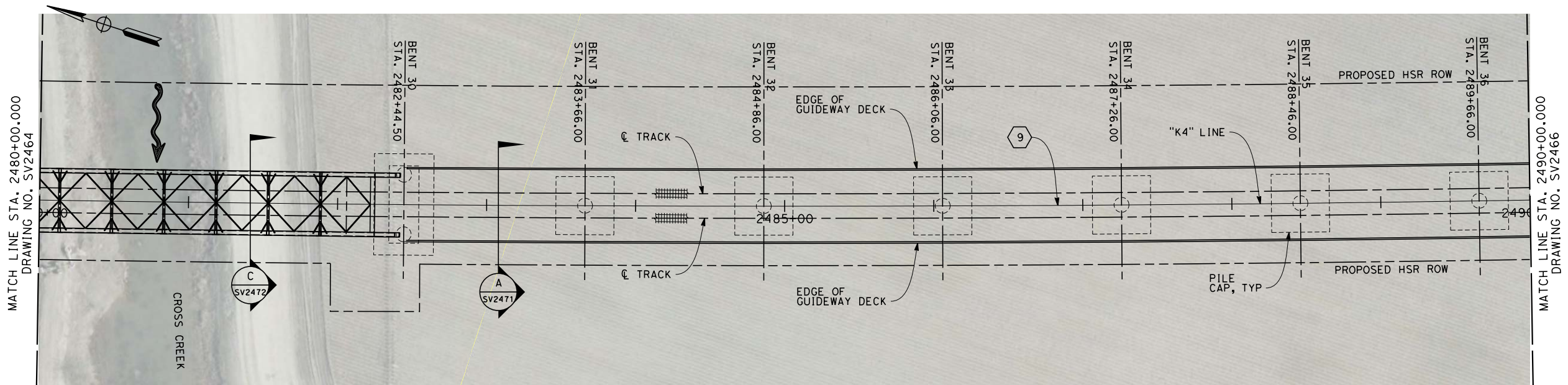
KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2464
SCALE AS SHOWN
SHEET NO. 5 OF 13

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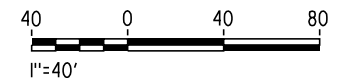
ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".
- CURVE DATA**
- 9
- R = 30500.00'
- Δ = 49° 01' 18.3"
- T = 13906.6'
- L = 26095.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

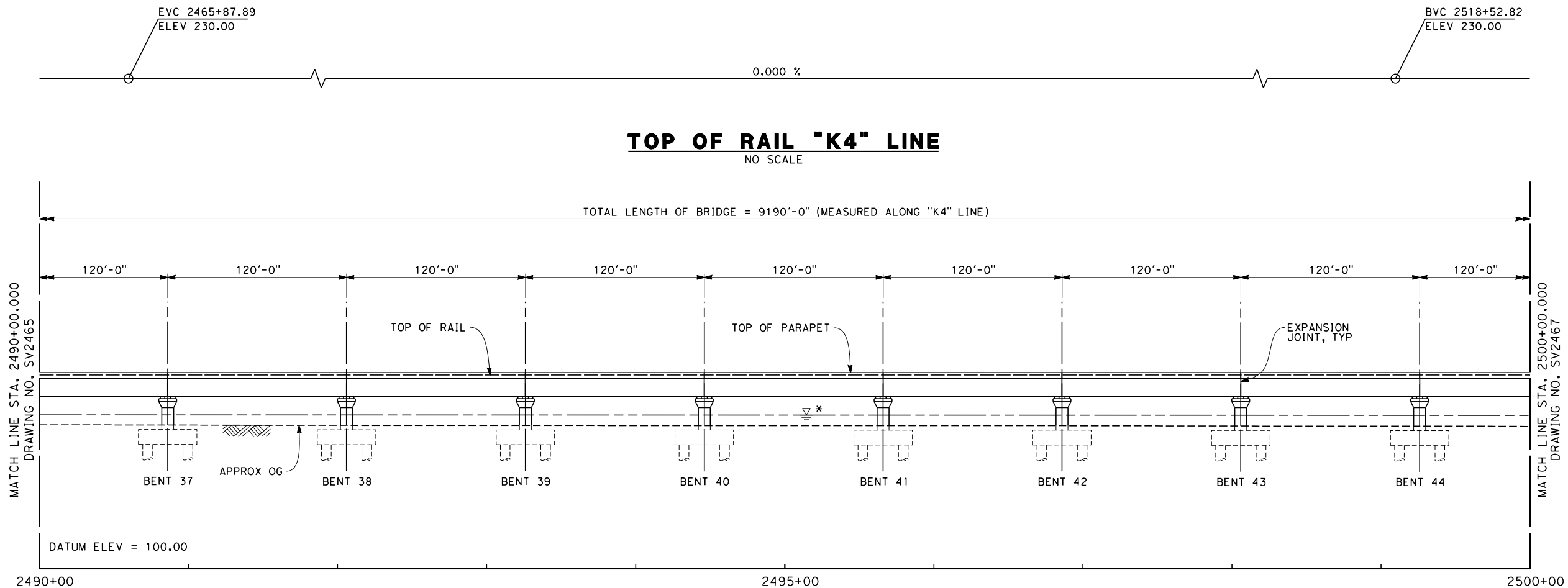


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

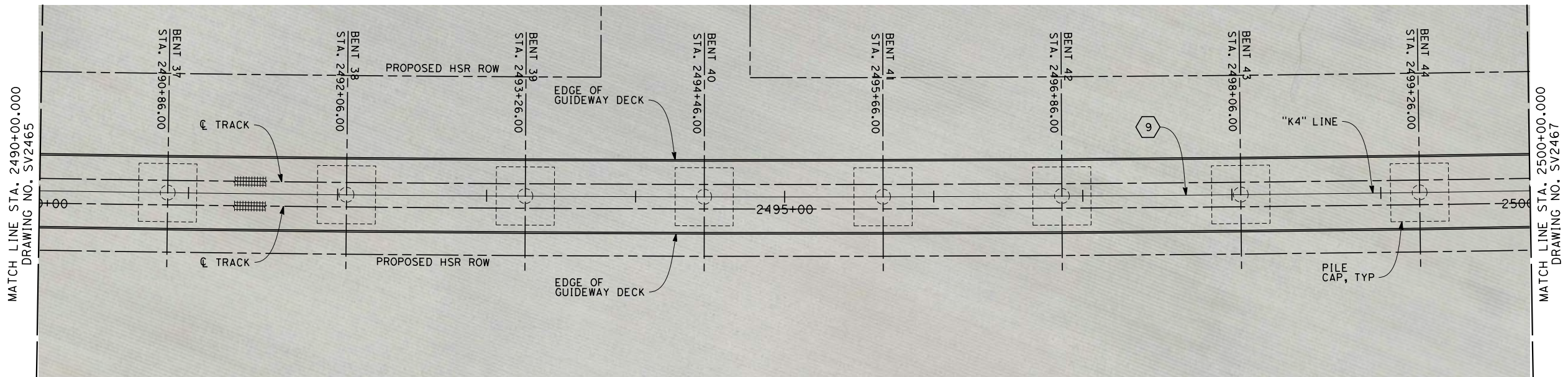
KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2465
SCALE AS SHOWN
SHEET NO. 6 OF 13

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

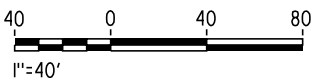
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

- ⑨
R = 30500.00'
Δ = 49° 01' 18.3"
T = 13906.6'
L = 26095.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

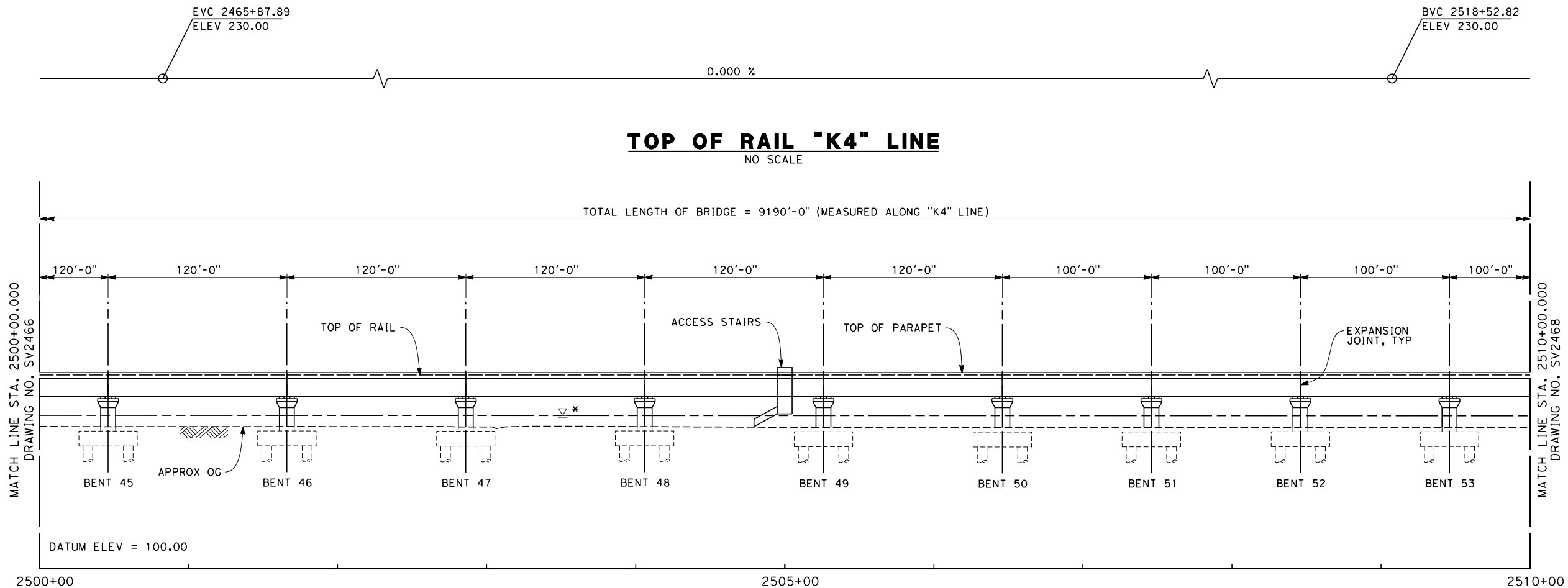


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

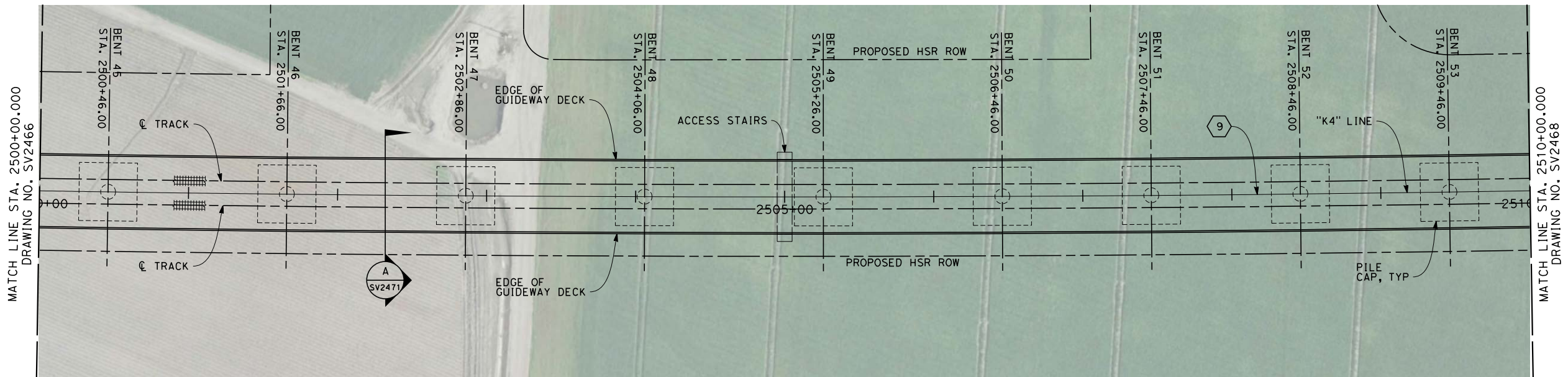
KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2466
SCALE AS SHOWN
SHEET NO. 7 OF 13

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

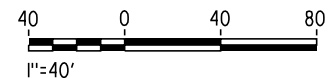
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

- ⑨
- R = 30500.00'
- Δ = 49° 01' 18.3"
- T = 13906.6'
- L = 26095.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

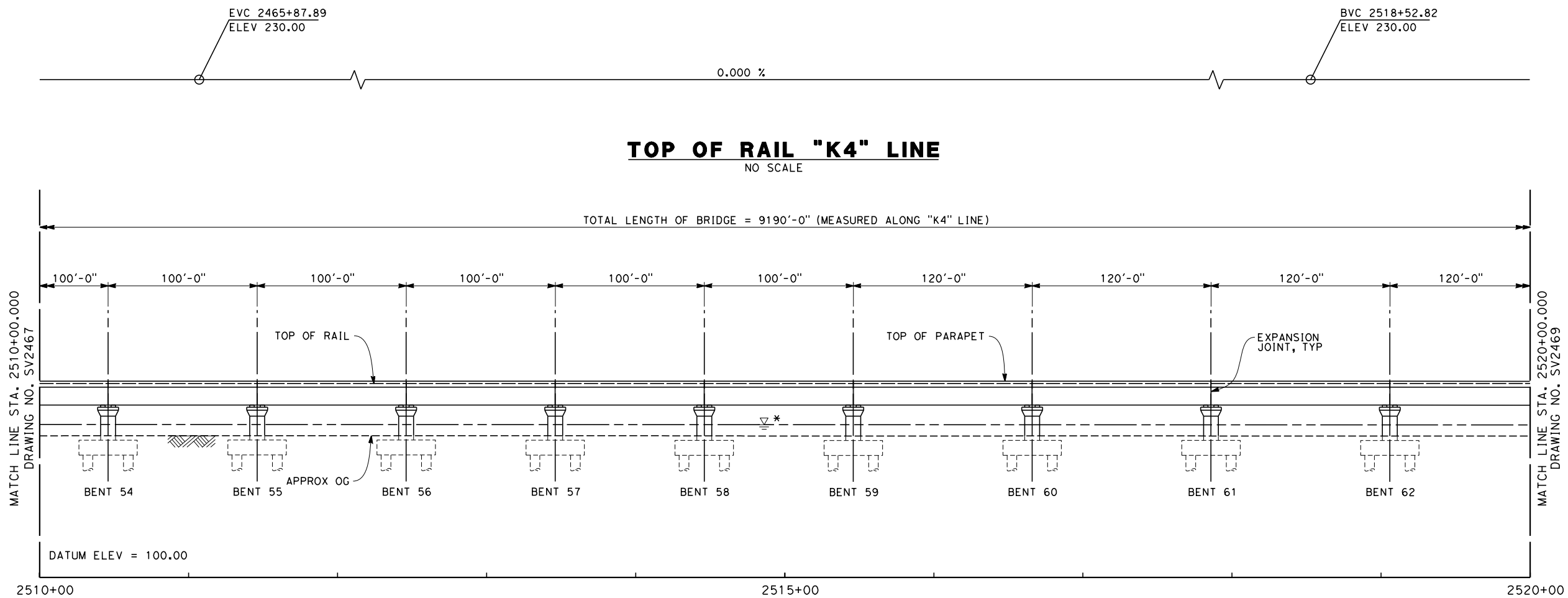


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

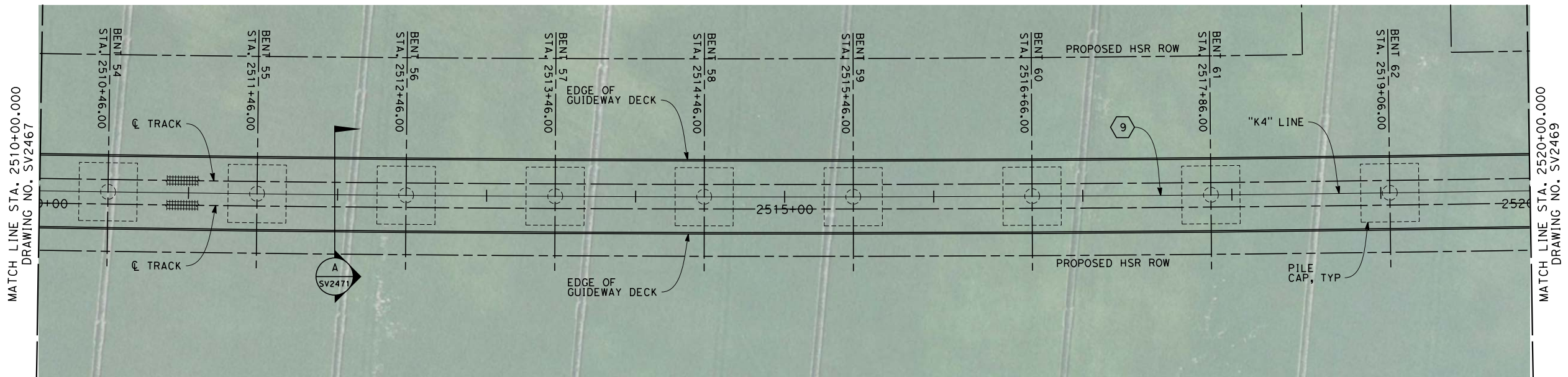
KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2467
SCALE AS SHOWN
SHEET NO. 8 OF 13

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

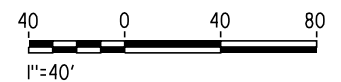
⑨

R = 30500.00'

Δ = 49° 01' 18.3"

T = 13906.6'

L = 26095.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

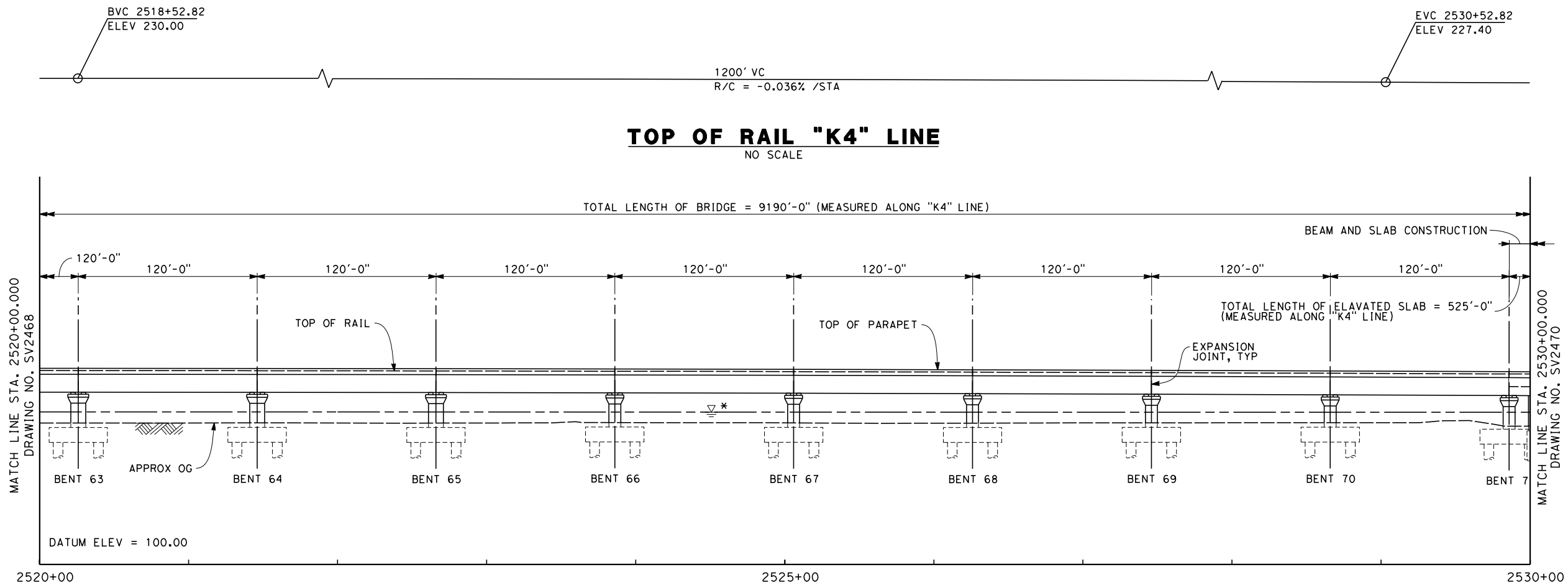


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

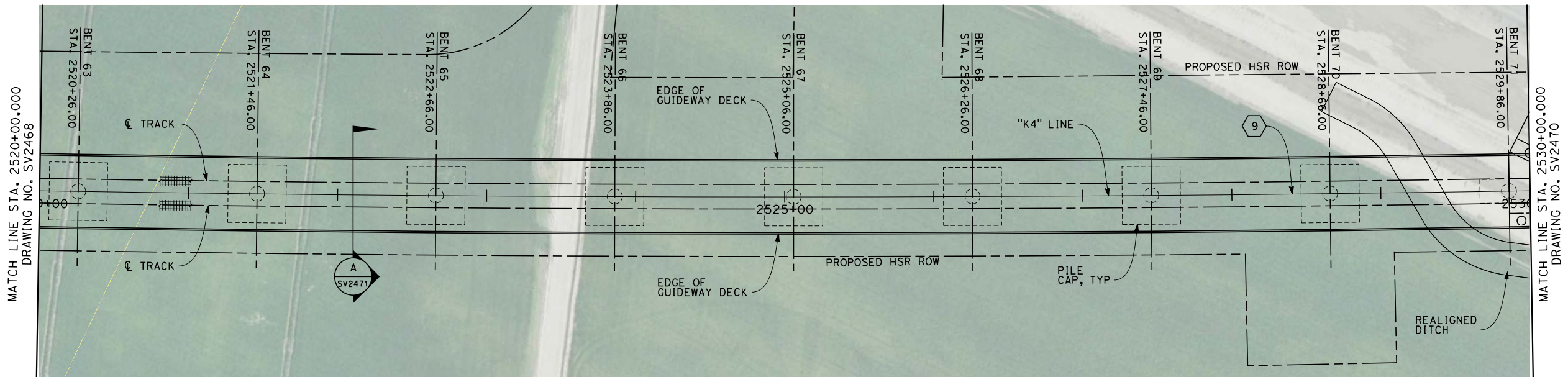
KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2468
SCALE AS SHOWN
SHEET NO. 9 OF 13

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

- ⑨
- R = 30500.00'
- Δ = 49° 01' 18.3"
- T = 13906.6'
- L = 26095.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

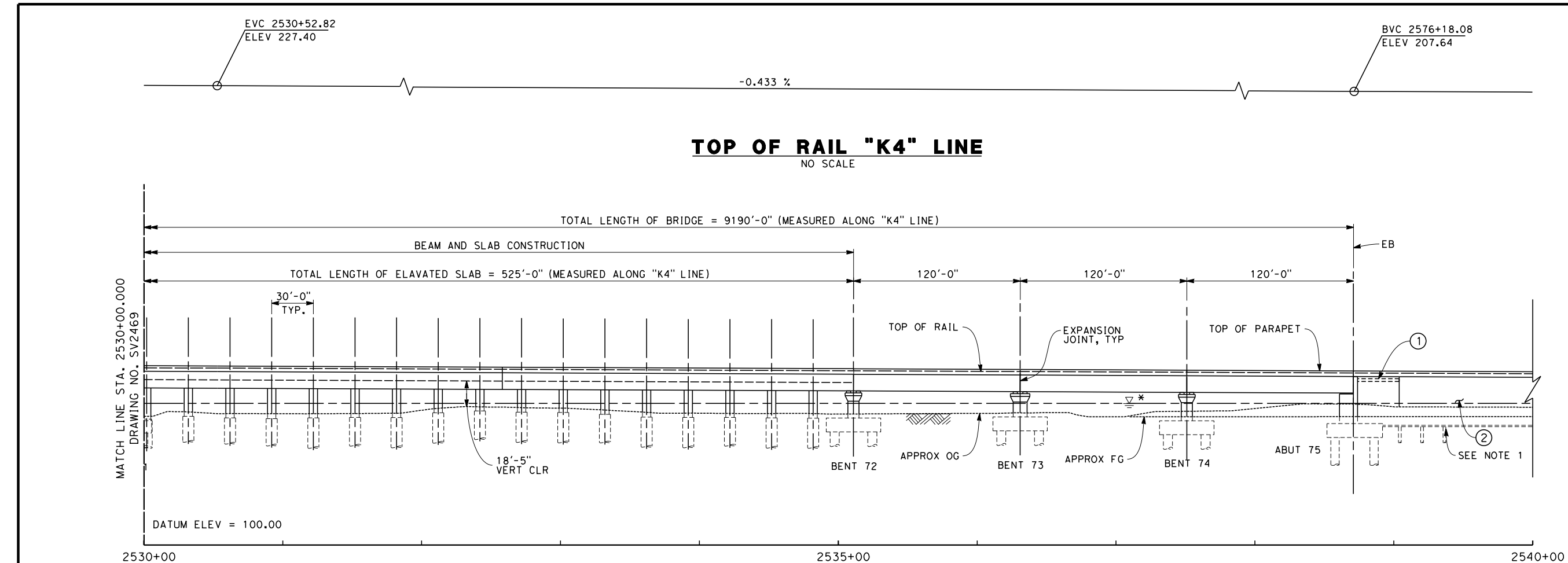
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

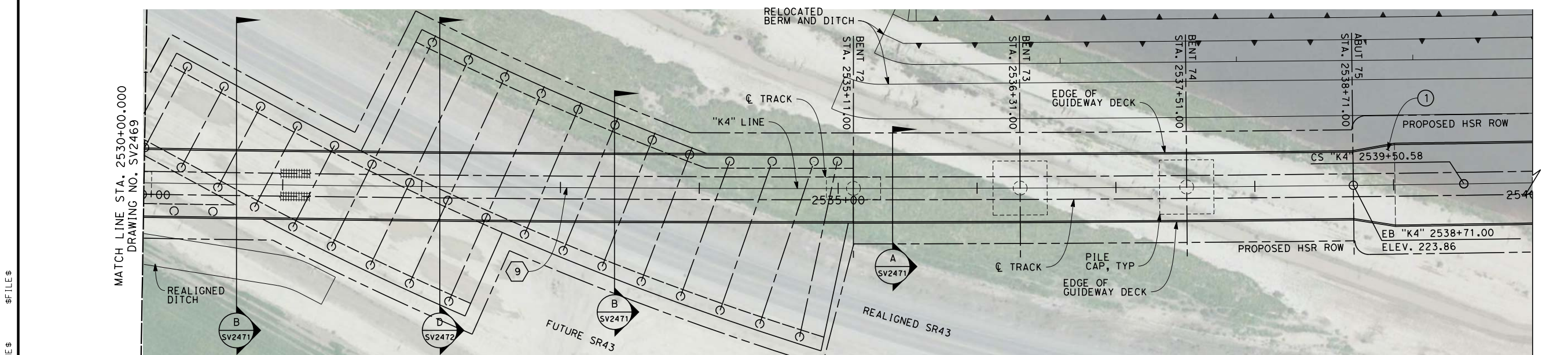
KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2469
SCALE AS SHOWN
SHEET NO. 10 OF 13

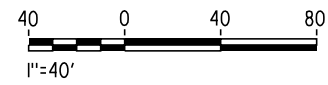


- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS- BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
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ELEVATION
SCALE 1" = 40'

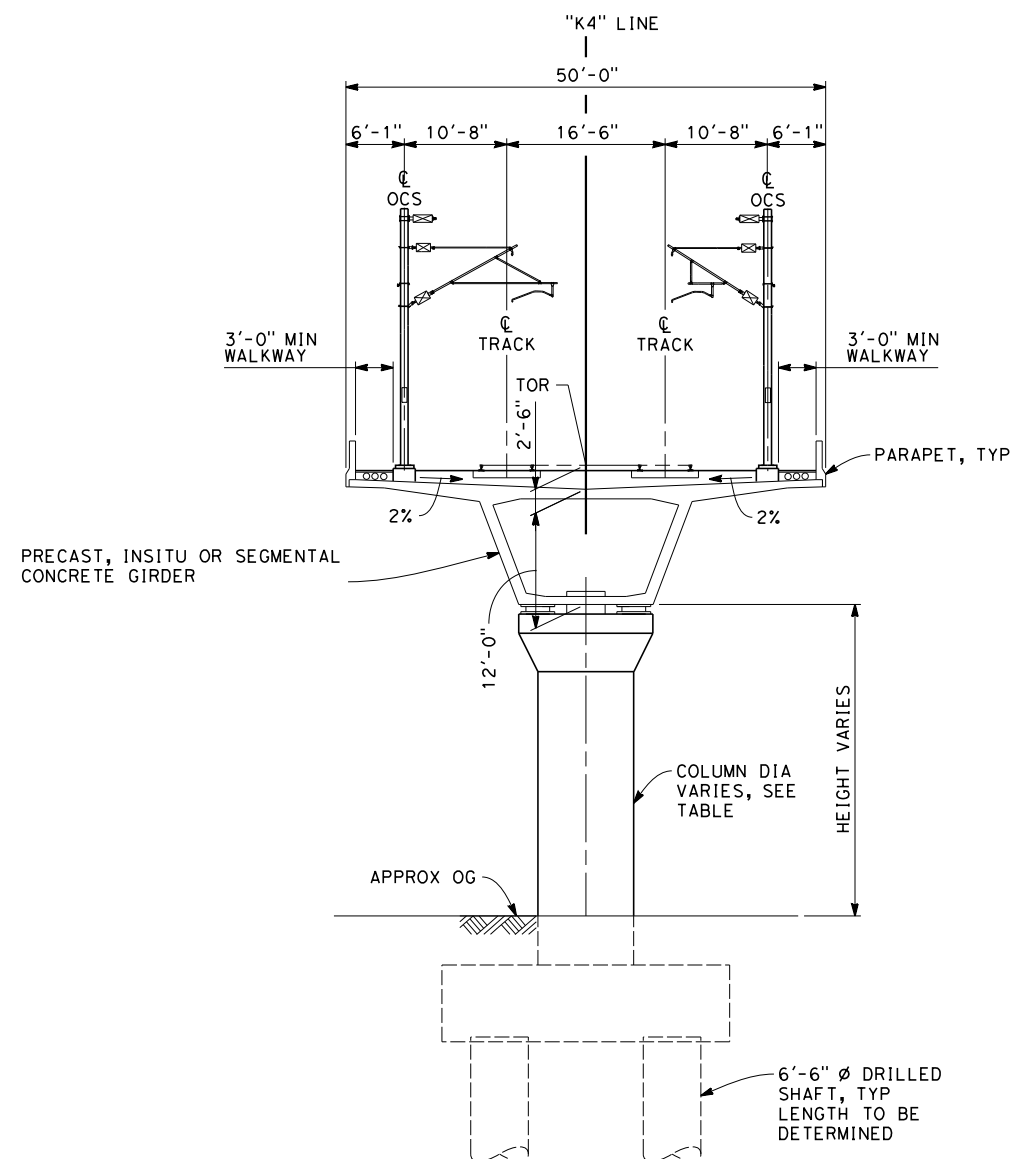


- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".
- CURVE DATA**
- ⑨
- R = 30500.00'
Δ = 49° 01' 18.3"
T = 13906.6'
L = 26095.5'



PLAN
SCALE 1" = 40'

SHEET NO.						DESIGNED BY M. FISHER	RECORD SET 15% DESIGN SUBMISSION NOT FOR CONSTRUCTION	 CALIFORNIA HIGH-SPEED TRAIN	 CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD				CONTRACT NO. HSR 06-0003
						DRAWN BY F. PALERMO				DRAWING NO. SV2470				
						CHECKED BY A. ARMSTRONG				SCALE AS SHOWN				
						IN CHARGE R. COFFIN				SHEET NO. 11 OF 13				
						DATE 12/31/13								
SHEET NO.	REV	DATE	BY	CHK	APP	DESCRIPTION								

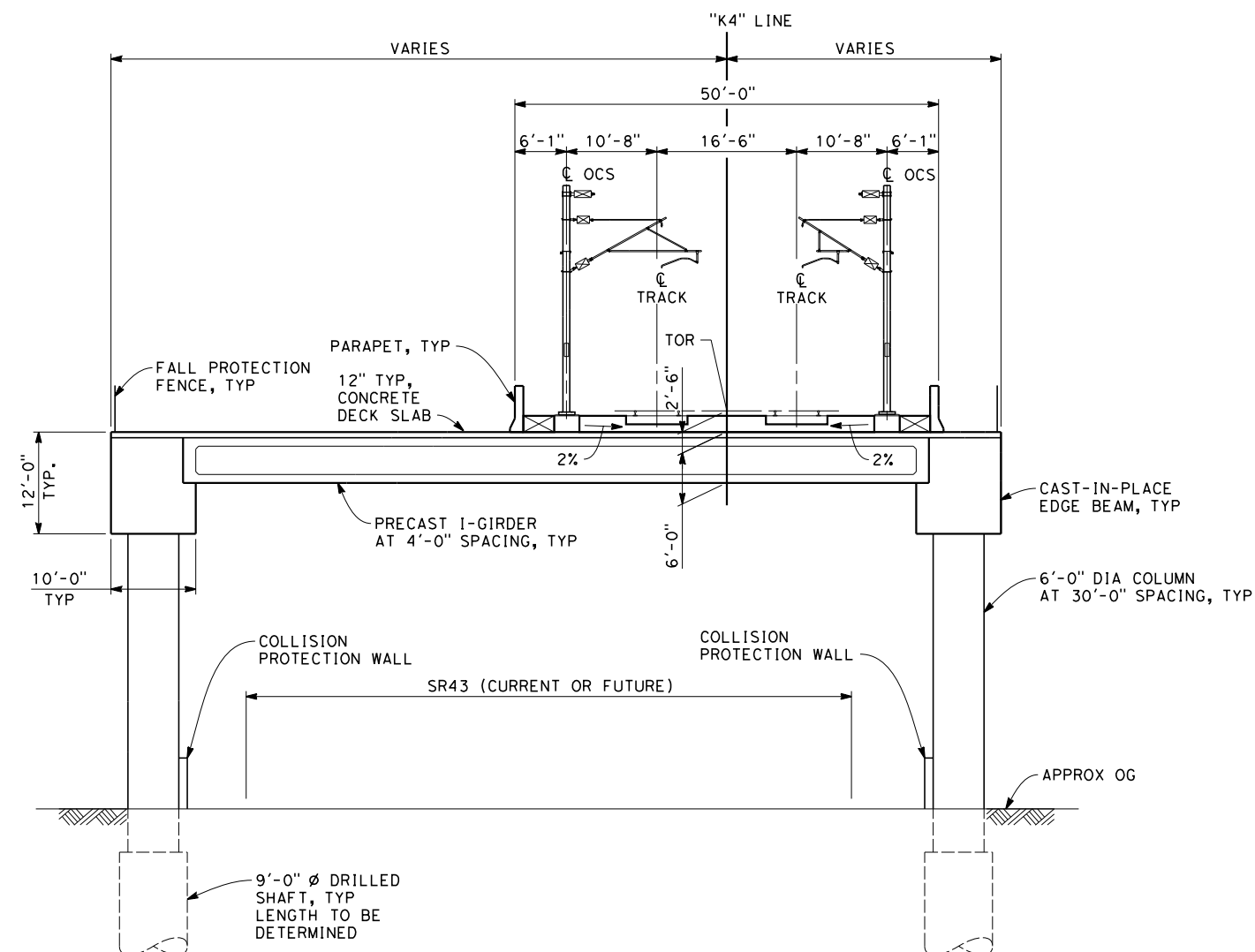


SECTION A

SCALE: 1" = 10'

STA 2446+81.00 THROUGH 2479+22.50
STA 2482+44.50 THROUGH 2529+86.00
STA 2535+11.00 THROUGH 2538+71.00

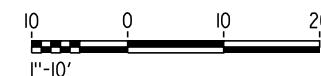
COLUMN DIAMETERS	
HEIGHT TO SOFFIT	DIAMETER
0-20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT



SECTION B

SCALE: 1" = 10'

STA 2529+86.00 THROUGH 2531+50.00
STA 2532+80.00 THROUGH 2535+11.00



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	M. FISHER
DRAWN BY	F. PALERMO
CHECKED BY	A. ARMSTRONG
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
DESIGN SUBMISSION
-
NOT FOR
CONSTRUCTION**



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

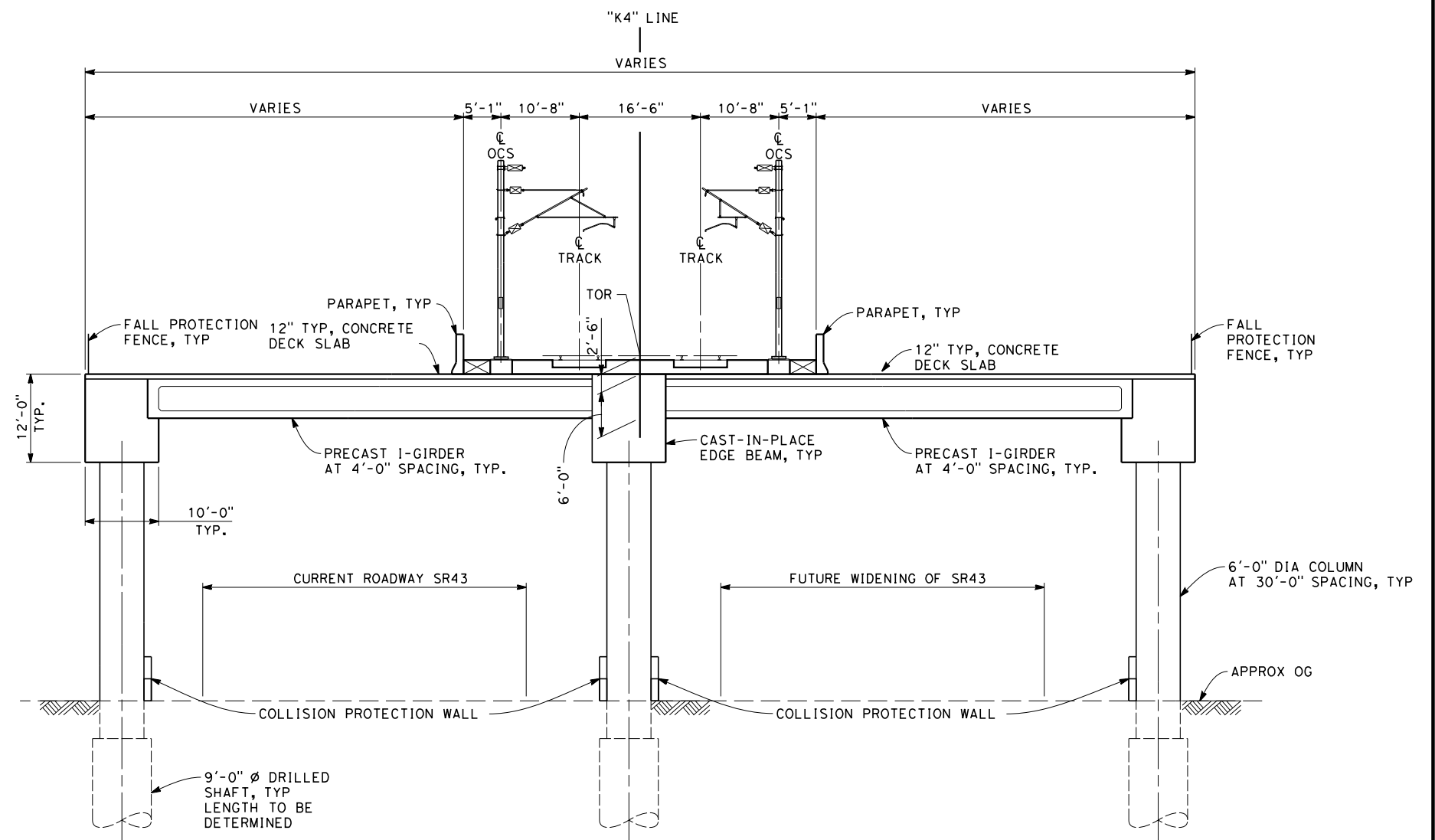
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
TYPICAL SECTIONS

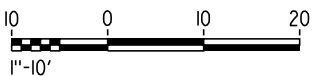
CONTRACT NO.	HSR 06-0003
DRAWING NO.	SV2471
SCALE	AS SHOWN
SHEET NO.	12 OF 13

This elevation view shows the bridge deck and its support. The deck width is 41'-2" between the "K4" lines, with 3'-0" overhangs on each side. The deck height is 3'-0" above the top of the support. The support structure is 51'-0" wide and 15'-0" high. The support is a 10'-0" diameter column, typical. The ground level (FG) is indicated. The deck is supported by a 6'-6" diameter drilled shaft, typical, with length to be determined. The deck is shown with a 2'-6" gap between the tracks and a 29'-6" minimum clearance between the tracks. The deck is shown with a 2'-6" gap between the tracks and a 29'-6" minimum clearance between the tracks.

STA 2479+22.50 THROUGH 2482+44.50



STA 2531+50.00 THROUGH 2532+80.00



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
TYPICAL SECTIONS

CONTRACT NO.	HSR 06-0003
DRAWING NO.	SV2472
SCALE	AS SHOWN
SHEET NO.	13 OF 13